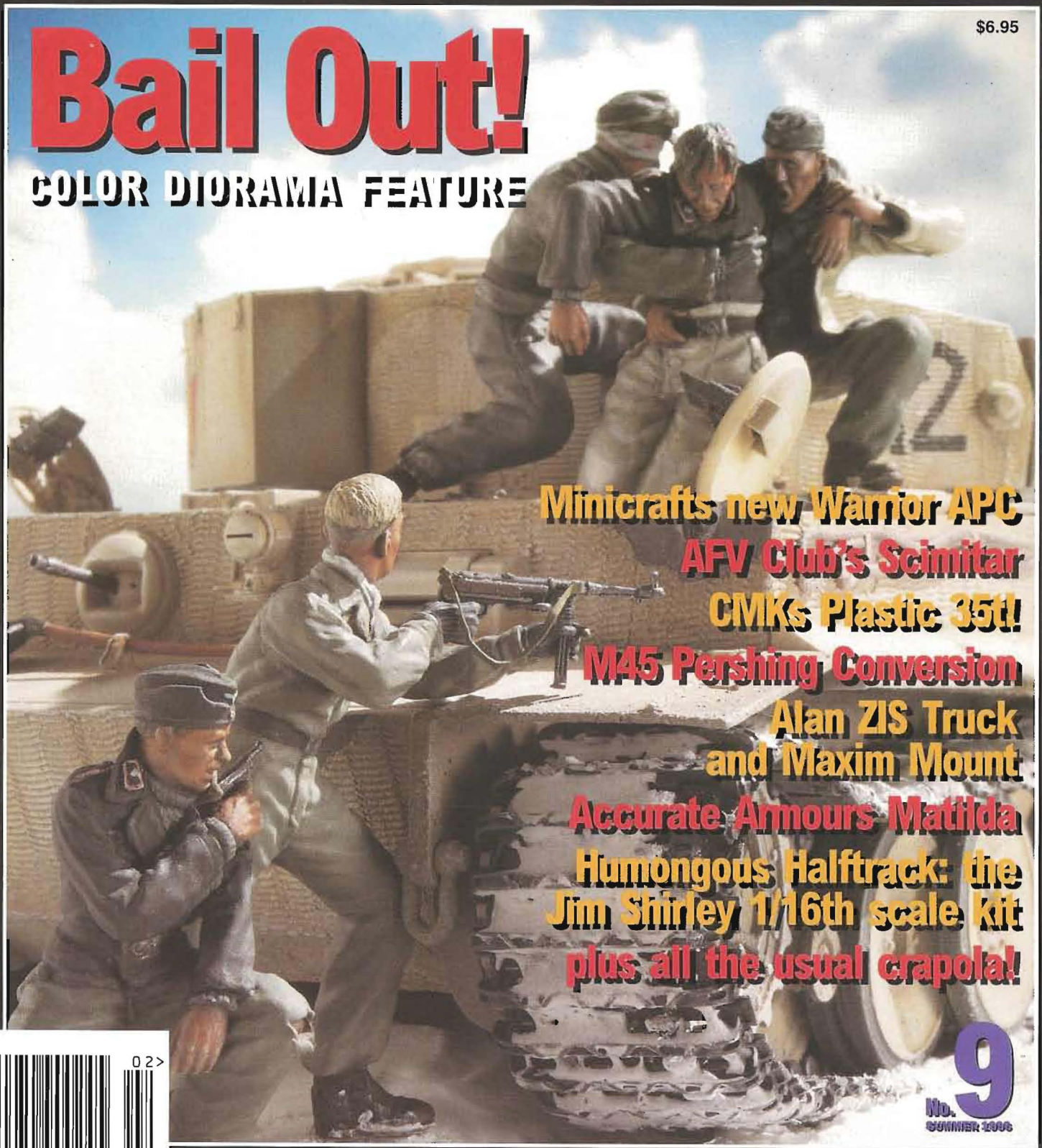
Military Miniatures

IN REVIEW

$6.95

Bail Out!

COLOR DIORAMA FEATURE



Minicrafts new Warrior APC

AFV Club's Scimitar

CMKs Plastic 35t!

M45 Pershing Conversion

Alan ZIS Truck and Maxim Mount

Accurate Armours Matilda

Humongous Halftrack: the Jim Shirley 1/16th scale kit

plus all the usual crapola!

No. 9
SUMMER 2006

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THE SHERMAN SAGA CONTINUES. THIS EPISODE: THE SUSPENSION

DRAGON - FROM RUSSIA

9024 1/35 British Valentine Mk. III

$20.98

We are pleased to announce that Dragon Models is releasing the three new joint co-operation (with Alan Hobbies and VM Co. from Russia) kits from the Imperial Series - 9023 Russian Zis-5 Truck, 9024 British Valentine Mk. III and 9025 British Bishop Self-Propelled Gun - at very special prices, even with the addition of unique features that will be available only in the Dragon release of these kits. The Zis-5 (9023) will feature additional Soviet Motor Rifle Troops (from 6019) at an incredible price of **$24.98**! For the Valentine (9024) and Bishop (9025), these will feature the new corrected track links as well as newly produced figures that are exclusive to the Dragon releases. The price for the Valentine and Bishop is just **$20.98** each and will be available in June, with all new box art. Check with your local dealer.

COMING SOON! - PANZER II & PANZER II WESPE!

9023 1/35 Russian ZIS-5

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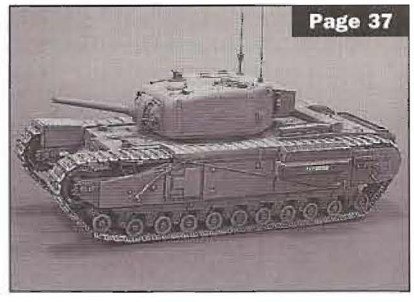

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ON THE COVER:

Masahiro Doi's highly effective Bail Out diorama. It features several of his scratch-built figures as well as the new Tamiya Otto Carius Tiger with Fruilmodellismo workable tracks and surprisingly few other added details.

Figures are something we don't often give much thought to, but "Doi-san" has mastered a variety of fairly basic techniques to create some stunning effects. The foot print of this scene is interesting, too, in that it really isn't much larger than the tank itself.

Look for the story and his tips starting on page 32.

From Your Editor

I've noticed that everyone in the hobby business gets a little grumpy during the summer. In the northern climes, I'm sure this is due to modelers out frolicking in all the nice weather. Modeling is probably not a fair weather sport (don't ask me what our excuse is down here).

Hobby shop owners and distributors alike tend to be moody. Stuff just probably isn't flying off the shelves like it does in the fall and winter. The interesting thing is that some stuff still sells no matter what. And this got me thinking about trends. Now I know we consider ourselves a breed apart. Somewhat above demographics and other such nonsense. But we are a definable audience, no doubt about it. We have buying patterns. Some products jazz us up, while others just sit there.

And we've gone though some interesting periods in the last twenty years or so.

The World According to Pat

This is sort of my little version of the development of the modern armor industry. Now I'm not going to go too far back, but one of the more important points to me was the appearance of the diorama sheets in the old Monogram kits of the Sherman, Panzer IV, Brümmbar, etc. At one time pretty much all of the military kits made by Monogram contained these sheets (including the airplane kits).

For the one or two of you out there who aren't familiar with these little wonders, each was a complete modeling article in full color. Authored by Shep Paine, Monogram appeared to give him all the latitude he needed to make the kits look terrific within some type of diorama. This would even include sometimes substantially modifying the kit to make it more accurate. What I felt was significant about this was that not only did it encourage you to build the kit, it encouraged you to DO STUFF with it, and to it.

Now when these made the scene in the early seventies, diorama building was not new, but Shep (if I may call him Shep) really did it well, and Monogram was in effect saying "look what YOU can do."

The sheets not only propelled the sales of the kits, I believe they also propelled the enthusiasm of those purchasing them. Small problem though. At that point in time the hobby was still largely dominated by kids. Guys in the ten to fourteen year old range, who's incomes, quite obviously, were limited.

We wanted all that cool stuff to make our models better and better, We wanted all the neat and keen accessories. Guess what? We grew up, went to college, and/or got jobs and also got... M-O-N-E-Y. Advertising gurus call this "disposable income." So by the mid-eighties many of us enthusiasts were ready to actually buy things like airbrushes, compressors, Swiss files, lathes, resin kits and other expensive goodies. I know many a modeler (armor or otherwise) who probably loves to buy more than he loves to build. (Let me let you in on a little secret: this is O.K. If wives can have closets full of shoes and clothes, you can have closets full of models)

So in many ways, it was the aging of the audience that propelled the "armor boom" of the last ten years or so. Someone else who helped out a great deal was a little Belgian guy by the name of Francois Verlinden. He and his related companies just about invented the cottage industry by producing all that neat stuff for us. It is probably true that all the activity in this area is what helped entice some of the plastic manufacturers back into the market. I have this on no solid authority, but it seems as though DML is the very creation of this phenomenon. There were kits that weren't available and DML made sure that they would be.... and now they are.

That brings me back to trends. The trend in the late eighties (in plastic) as the armor industry began to warm up, was distinctly Soviet. I think there were two reasons for this. The first is that Soviet armor had never been properly exploited by the industry, and secondly, the Soviet military had a tremendous mystique about it at the time. Information was ultra difficult to come by—downright hazardous to your health in some cases. As anyone who reads the paper knows, this mystique evaporated pretty quickly with the collapse of the Soviet Union and the Gulf War. The much ballyhooed TCI kits turned out to be less than exciting when they finally arrived under the Lindberg label. DML picked up the ball with its Soviet kits towards the end of this trend.

The trend quickly turned back towards the all time favorite: German. Modelers seem to fall into two camps here. They either love it or they hate it. Those who love it remember when they had to bust their collective asses to build a decent version of just about any German armor kit. Some vehicles could only be scratch-built.

Those who hate the German trend, hate it because it keeps them from getting everything else they want. This is understandable, but their needs have been addressed to a certain extent by AFV Club. The M88 is not only one of the best kits on the market today, it's also one of the best values. DML has also done a great job with its Korean War series, producing several fine kits. And every once in a while a cottage industry company like CMD comes along with a kit like the M48 (bravo!).

We always have to realize here in North America—and this is a little hard to take—we're not the biggest segment of the modeling audience (I know it's tough to hear). England and Europe represent a slightly larger segment, but by far the Asian audience is the biggest. What they want we get (think Type 90).

So ride the trends, and maybe even think about broadening your modeling horizons. That M88 is bound to seduce even the most ardent Panzerphile. And ditto on the Tamiya Wespe , to you Abrams riders.

Are we seeing the market slow down? I don't think so. I think what we have is just tons and tons of stuff to choose from. This is bound to slow the pace of sales a bit, but it doesn't necessarily deter the buyer's desire for existing product, or especially, new ones. We've got much more thinking to do before we buy. We need to be informed. Maybe even courted. I think it will be the companies that do this that will continue to prosper in the industry.

—Pat Stansell
Editor, MMiR

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Ampersand Publishing COMPANY, INC.

Jäger Me This

I was recently introduced to your magazine by Gordon Brown at Cromwell Models over here in Scotland.

Being old enough (just) to remember the old Airfix Tiger in 1:72 scale as a "new release" and to recall the general bewilderment when Tamiya appeared on the scene with such an oddity as 1:35 scale, I have been into military modeling long enough to have seen quite a few modeler's magazines come and go. It is no exaggeration to say that MMiR is by far the finest product in its field that I have ever seen. I am hooked already.

The quality of the kits built for review in the magazine, combined with first class photography and that unmistakable sense of humor which runs through everything, results in a product which in all honesty I think would be extremely hard to better.

Your very kind review of my book *Loyalty is my Honor* in Vol. 2 No 3 of course did nothing to detract from my already high opinion of MMiR!

On that subject, from my personal conversations with many of the SS vets, I think there is indeed an element of jealousy in the opinions they expressed about the U.S. Army. They were very tough cookies indeed, with first class weapons and equipment, but often let down by appalling shortages of fuel and ammunition and almost total lack of air support towards the end. When they did capture U.S. troops they were often astounded by the level of comforts supplied to the average GI as compared to themselves, and of course the overwhelming weight of materiel supply available to the allies, and the Americans in particular, was a source of great frustration to them. Unable to direct their rage at the inefficiencies on their own side, for obvious reasons, they seemed to have turned it against those they saw as being "better off" materially. Most however, it must be said, did express a liking for the Americans as people and hoped like crazy that they would be able to join forces with the U.S. against Stalin in 1945.

Ridiculous though that might seem to us today, it seemed like a real possibility to them then.

Can I also pick up on a small point in your review of DML's German Ski Troops. The review states that "There really were no German Ski Troops per se." Not so!

1st Ski Jäger Division was formed in 1944 having been upgraded from a Ski-Brigade formed the previous year.

It fought well enough for several of its personnel to be decorated with the Knight's Cross of the Iron Cross, and had its own special cap and sleeve insignia. There is some coverage of them in my new book for Osprey *German Mountain & Ski Troops* which has just been released over here (for which by the way, young Scots artist Stephen Andrew has produced some exceptional color plates).

Best regards, and keep up the good work,

—Gordon Williamson

✉

Could I borrow your comb?

I just found out today after talking to George Rabuse (he owns one of the few M4A4s still around) that the comb device on the transmission of the Sherman was originally used to help secure the tank during overseas transport. Apparently a tie down was attached to the transmission inside the tank to lock the tank in gear. This tie was then snaked out through the hull MG opening (the .30cal MG was removed during shipping) and then tied to the comb device outside the tank. When the tank was ready to be moved the tie was removed from the outside of the tank and then could role free. Once on land and in service the comb device then could be used to secure the canvas cover that fit over the hull MG. Apparently Mr. Rabuse just talked to a person that worked on the Shermans and helped ship them during WW II and told him what the device was for.

DML's new Sherman is a great kit. It is vastly better than the Tamiya M4 in detail in many ways. It is also cheaper and has a lot more parts in the kit to make a variety of M4A1 Shermans. After seeing Tamiya's German tanks, their M4 was a disappointment.

Keep up the great work in the magazine. It is by far the best armor magazine on the market. I especially enjoyed the diorama layout in issue 8.

—Michael Bedard

O.K. This is the first explanation we've heard. Now although it sounds pretty good, we've still got some questions. Why did it run both vertically and horizontally? Why is it seen on both sides? Why is it seen on the M5?

✉

M103 you say?

In reference to Mr. Gregory Garand's letter in your No. 8 issue, there is a kit of the M103 heavy tank. It is ROCO Minitanks #182.

There are several companies that carry the ROCO line. Stuemples (see ad in this issue), Walthers in Milwaukee (414-527-0770), IHC in Philadelphia (215-426-2873) and Stevens International in New Jersey (609-435-1555) are all known to deal in the line. If they can't sell direct, they can probably recommend a good source.

—An anonymous HO Fan

Just What I Always Wanted

I just wanted to thank you for a fantastic V2, 3 and I wanted to offer an observation and a couple of suggestions.

First, as an armor modeler whose original stint went from 1967 to 1973, I am ecstatic, thrilled and even overwhelmed by the WWII German armor available to us, and as reviewed by you.

I quit this facet of the hobby due to sick Panthers and terrible Tigers. We very much needed state-of-the-art kits to center our collections around. This heavy German armor is central to my interests and many others. Please continue to make it your emphasis also. We waited decades for these kits. Cover feature them, in-depth review them and enjoy all the neat accessories, too.

Everything I ever dreamt of in 1/35th with tracks is coming true... I just enjoy the hell out of it!

—Michael Dunham

Choices, choices. We've got them, that's for sure. We like it this way. It is worth mentioning though, that we don't actually cater to any one area. Rather, we hope to showcase what we consider to be a particularly hot group of products. Because of the immense popularity of the subject, most often that product is German WWII. Not always, but frequently. So the plethora of German stuff in our pages is really the result of the industry and not our own whims (however bizarre they may be).

We will continue to offer what we hope is a cross section of the market during any given quarter, but if things remain as they have, it will have a distinctly German flavor.

✉

I have thought about Pat Stansell's editorial in Volume 1 Number 2 (or is it number 6 now?). I think the biggest hole in the armor model hobby is the relative lack of kits of armor used in the Arab-Israeli Wars. I mean, where has 90% of the post-WWII armored warfare taken place? Not in Vietnam, not in Korea (even though I thought DMLs Korean War series was great), not even in the Persian Gulf. No, it took place in the Sinai Peninsula and the Golan Heights in 1948, 1956, 1967, 1973 and 1982.

Just think of all the goodies we could get if companies like DML and Tamiya would release a series of Arab-Israeli armor. Admittedly, Minicraft has done an admirable job of representing these conflicts, but it appears that their resources are somewhat more limited than the other companies and their release schedule much slower.

Some of the vehicles on my wish list include several variants of the Centurion, especially those with reactive armor. This could also lead to Korean era Centurions with the 20 pounder or the South African Oliphant.

I'd also like to see the M51 Isherman and other modified versions like the L-33 SPG, plus Israeli versions of the M48, M60 and of course, all the Merkava Marks I-IV. On the Arab side there is the JSIIIs, T-10s, post-war T-34s, Syrian Panzer IVs (!), T-55s, T-62s and many more. And again these tanks could represent other armies as well.

I know that most of the hobby from manufacturers, to magazines, to the individual tread heads is virtually dedicated to World War II right now. But can anybody say that the Israelis are less innovative that any of the combatants in the second world war? I think not.

—Steven "Merkava" Litel

On the bright side Steve, DML has announced an M50 Sherman version for possibly this year. Could the M51 be far behind? We are also expecting an entire legion of Centurions to pop up during 1997 from Accurate Armour in Scotland. Some of these are bound to be Israeli types (or at least not too hard to convert). Verlinden has done an admirable job on much of the Israeli stuff, especially as it relates to the M113. Some subjects are still unmined such as the M3 half-track and some of the more bizarre variants of the Sherman. We do have an excellent version of the T-72M thanks to Tamiya, but not too much in the way of conversion parts for other versions. Hey are you after market guys listening?

✉

Got a problem with any of this?

Send those comments to: *Mail Sack, Military Miniatures in Review, 21045 Commercial Trail, Boca Raton, Florida 33486-1006, or discuss complaints, problems, wisecracks, etc. via the Internet. Find us at the handle:* ***MMiR35701@aol.com***

Letters are sometimes edited for brevity, grammar, spelling, national security and other stuff. We're sorry that we rarely, if ever, are able to personally respond to correspondence.

Short Takes

The Year in Preview

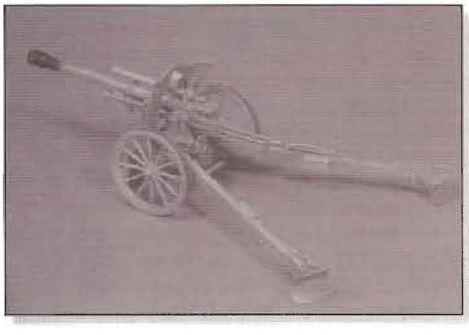
Accurate Armour

AA has sent along pix of their latest modern offering, the **K61 VSEL AS90 155mm self propelled gun**. This is the very latest in British artillery technology, brought to real life by the Vickers company. AA's version is a complete resin, photo-etched brass and white metal kit. It is said that the master was created with the cooperation of Vickers Shipbuilding & Engineering, Ltd. Sounds good to us!

For more information, contact Squadron Signal Mail Order in the states or Accurate Armour, Ltd. Units 15-16 Kingston Industrial Estate, Port Glascow, Scotland, UK, PA14 5DG.

Aires

Aires, who is represented by Eduard in North America has two more products to add to their growing line of conversion sets.



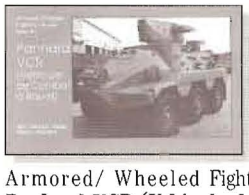
The first is not a conversion set at all, but a full kit. The first in the line. The subject is the **German le FH 18/1936 10.5 cm light field howitzer**. This is a highly detailed item composed of an extensive sheet of photo-etched brass and several resin parts. It is stock number A3007 and it retails for $49.99.

The second new item is a conversion for the DML/Gunze (or Revell in Europe) Panzer III J. Number A3008 will convert the kit to a **SU-76i Russian assault gun**. This was the Soviet idea of recycling realized by sticking their 76mm gun into captured Panzer IIIs. Another big piece of brass and resin for $31.99.

Both these items are top quality and are worth checking out. See your local shop or check with Eduard at the address listed below.

Armored Car

Armored Car, as you may or may not know, is a very well put together newsletter pertaining exclusively to wheeled fighting vehicles, a.k.a. Armored Cars. If wheeled AFVs are your bag, this is the place to be. Published bi-monthly, its twelve pages are always packed with all manner of juicy tid-bits like unit histories, scale drawings and interior photos.



In addition to the newsletter, Armored Car has now branched out into a series of highly useful data booklets. The first of their new Armored/ Wheeled Fighting Vehicle series is titled **Panhard VCR (Vehicule de Combat a Roues)**. The subject vehicle was used by the Iraqis in the Gulf War. The 20-page booklet covers the missile-armed version, as well as several other variants in use around the world. It contains 17 photos and four sets of 1/76th scale drawings.

The second is titled **Daimler 'Ferret' Scout Car** and covers the British post WWII Ferret. All of the major marks are illustrated with photos and/or 1/76th scale drawings.

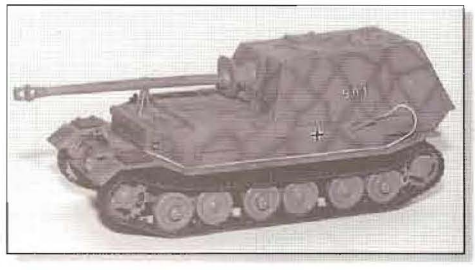
Both of these booklets are $4.95 each plus $1.50 per order postage. Each measures approximately 8.5 by 5.35 inches.

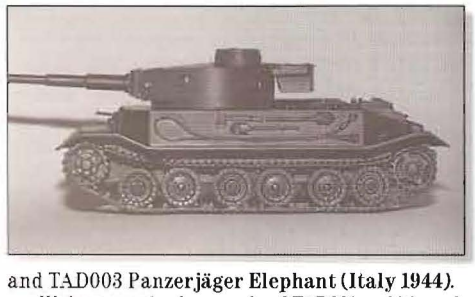
The second series currently in print is the Armored Car Profile series with the first title being **Spähpanzer 2 'Luchs' Armored Reconnaissance Vehicle**. This is in the larger 8.5 x 11 inch format and it has 20 pages with 41 photos, 2 illustrations and 1 scale drawing. The stock number is #2001 and is ISBN 0-9651125-2-7. Suggested retail is $7.95.

All these books may be ordered directly from ARMORED CAR, 4520 Drake Ct. NE, Salem OR 97301-3058. They are also available from Portrayal Press and Squadron Mail Order in the U.S., and Chris Evans Books and Model Search International in the UK.

The Armoured Division

Here's a new one. The Armoured Division has offered up three kits in little ol' 1/48th scale. They are: **TAD001, Porsche Type 101 VK4501 (P) Tiger; TAD002 Panzerjäger Ferdinand (Kursk 1943);**





and TAD003 **Panzerjäger Elephant (Italy 1944).**

We have received a sample of TAD001 and it's really quite impressive. The suspension and tracks are beautifully molded as one-piece metal castings! This is really something to see and of course, greatly simplifies construction. The balance of the larger pieces are cleanly cast in tan resin.

Truly interesting and unique models. 48th scale freaks are going to, well... freak when they see these.

The kits have no U.S. distributor as of yet, but they are available direct from The Armoured Division for £51.00 each, which is approximately $76.00 give or take. This most likely does not include postage.

For more information, contact The Armoured Division, 27, Streatham Place, Bradwell Common, Milton Keynes, Bucks. MK13 8RH. Tel/Fax: 01908 694935.

Armor Research

The new proprietor of Armor Research, Ray Mehlberger was kind enough to remind us that we are, indeed, morons. Armor Research is located in IOWA, rather than Pennsylvania as we originally stated. Drop them a line at 845 Orchard Road, Marion, IA 52302. Tel: 319-377-0429. Send him a SASE with 55 cents postage on it for his current list of modeling munchies.

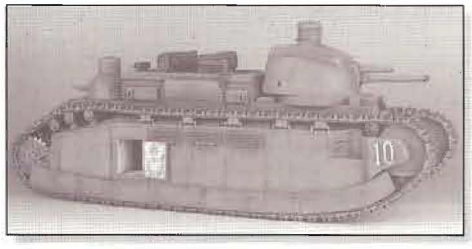
Azimut

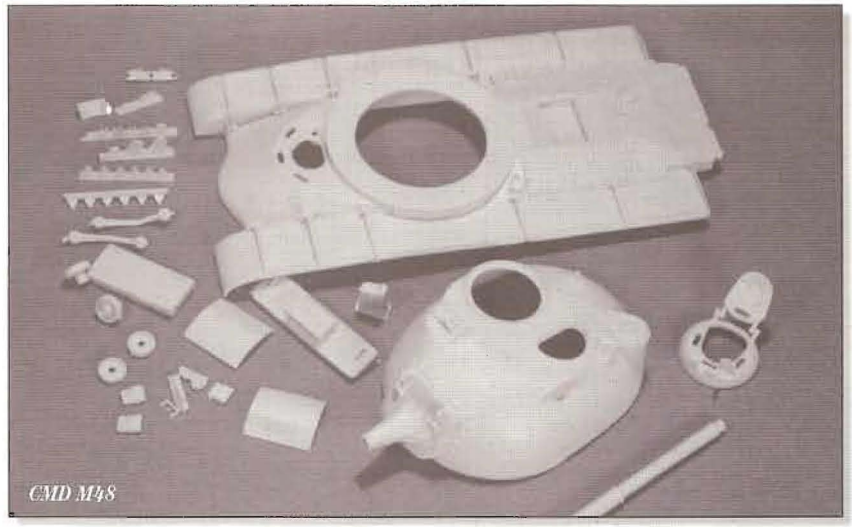
The ever prolific Azimut has the following new items available for the late summer. 35078 is a **SdKfz 251/17**. This is the 251 with the 2cm flak mounted.

This is a complete kit in resin and white metal for $134.95. 35087 is an interesting one. This is the **Russian WWII 85mm ZP Obr. 39 Anti-Aircraft gun**. Another complete kit, it also includes a full carriage. $95.00 retail.

35156 converts the Tamiya 232 eight-wheeled armored car into the **SdKfz. 263 radio vehicle.** $39.95 retail.

The **French FCM 2C Heavy Tank** is now a reality. This is the enormous "le char de rupture" briefly fielded by the French in 1940. The kit is BIG and very





attractive. It includes mostly resin parts with injection molded wheels and tracks. Waterslide decals provide two sets of markings. Look for stock number 10000 and a retail of $242.95.

In Europe, the railroad trucks that hauled the Char 2C are also being offered as an additional purchase. This option is TBA stateside.

Readers on that side of the planet can direct questions to Azimut Productions, 171 rue de Charenton, 75012 Paris. Phone: (1) 43.07.06.16. Fax (1) 43.47.11.93.

Readers in North America can find most of the line through The Red Lancers (see ad on page 9), or to locate other retailers in the U.S., check with The Right Stuff Distributors at P.O. Box 2310, Bassett, CA 91746-0310. Phone: (818) 968-1333.

Bandai

You remember Bandai. 1/48th scale armor stuff up the wazoo a few years back. You may not remember that Bandai was the first company to experiment with armor in 1/15th scale. These kits go way back—the first was introduced in 1974. The line was originally composed of a **Panzer IV, Tiger I, Hummel, Nashorn** and **StuG IV**. They were somewhat fugly, but they've been collectors items for a long time.

Well you guessed it. Everything old is new again. By sometime this fall we should see the first of these reappearing on the world's shelves.

No word yet on retail and stock numbers, but we'll keep you up to date.

1st Corps/Brookhurst Hobbies

Brookhurst has forwarded us samples of their new line of 25mm war gaming figures. There are four subjects and each package contains either two or four white metal figures.

Although the stated scale is 25mm, it works out to approximately 1/48th scale. This means you've now got some company for those Bandai re-releases from Fuman.

The subjects are: GIN1, **German infantry advancing with rifles**, $4.50; GIN 7, **German MG Team Firing** (2 figs.), $4.00; PBT 1, **British Paratroops advancing**, $4.50; and PBT 7, **Trooper firing Bren & 2nd**, $4.00.

For more dope on these metal midgets, contact Brookhurst Hobbies at 12188 Brookhurst St., Garden Grove, CA 92640. Tel. (714) 636-3580, Fax (714) 636-9150.

Chesapeake Model Designs

Lot and lots of activity in the CMD camp. Looky what they did: **an M48**. "M48? You mean the flat deck Patton? The Elvis Tank?" Oh yeah. One and the same. It will feature all the fantastic CMD resin casting and will backdate the Tamiya kit with an upper hull, turret, gun barrel and dozens of little resin bits and pieces. We have had a chance to gape at an advanced copy and we are well and truly sold. This is the early "plain M48" version and the M48A1 may be a future offering. The M48 is scheduled for a late summer release and price is TBA.

Also from CMD is an improved version of the **German Schmäl Turm**. Again, all in resin, this piece is intended for the Tamiya steel-wheeled Panther. Another late summer item.

Don't forget that CMD represents the complete line of Friulmodellismo link-to-link tracks, too. New items

Jim Shirley Productions
120 MM SDKFZ 251 / D HANOMAG
120 Vista Oak Dr. • Longwood, Florida 32779
Call (407) 333-4407 • Fax (407) 333-0220
(allow 4-6 weeks delivery time) *Overseas orders add 15%
USA *Add $16.00 shipping charge per kit.
JSP014 Hanomag.....$385.
JSP015 T-72..... $475.
NEW!
JSP016 M3A2 ..... $395
Resin Model Kits
JSP001 M1025.. $275
JSP002 M998.... $275
JSP003 M1A1.... $500

include a set for the **SdKfz. 7 8-ton half-track.** 120 metal links make up the set and this includes the drive sprocket and the standard assembly jig, all in white metal. This is stock number ATL-24 and it retails for $39.95. The drive sprockets from this set are also available separately for $7.95.

We have finally had a chance to see the new **Wespe** set and the links are truly outstanding. Each is beautifully molded and there is virtually no flash present on the castings. These are really something special. For these reasons, CMD is frequently re-stocking them, so don't wait too long. Number ATL-30 should also retail for $39.95.

Yet another product line represented by CMD is the **New Connection/Scratchyard**. This is a German firm that specializes in a whole range of neat little accessory items. CMD has caused quite a stir around the show circuit with these little German treats.

There are several sets of turned brass and aluminum artillery rounds in the line. Sets for the **15cm sFh 18, 12.8 cm Pak,** and the **10.5 cm Haubitze lFh 18** are offered, and they range in price from $11.98 to $16.98. These are highly reminiscent of the Tamiya sets and are turned with the same type of exacting precision. All include rounds as well as totally hollow shell casings.

Also off the lathe is a real gem, a **four-piece barrel group for the Tamiya Quad Flakvierling 38**. This is item number 3517, $16.95 retail.

New Connection has a substantial conversion kit for the DML Hetzer. This creates the **Bergehetzer** version and it contains all kinds of stuff, like a winch, controls, periscopes, back spade and a folded crane. This extravaganza will be number 3501 and it will retail for $58.95 when it's released this summer. Neato.

CMD and The Scratchyard will collaborate on future variants of the Hetzer, with CMD providing the resin elements. Some possible future subjects are the 2cm Flak Hetzer, the "Stummel" version, and the 150 SiG variant. This latter item will also include a crew.

And speaking of figures (weren't we?), there are three figures in the New Connection Line. They all are labeled as German mechanics with the stock numbers NC-HM01 through 03. Each retails for $11.98 and they'd fit perfectly around that Bergehetzer.

For more skinny on this developing line, periodically pester CMD at Box 393, Monkton, MD 21111.

Custom Dioramics

Big time goodies on the way from our Canadian pals. Here's a glimpse at what's coming this fall.

August will bring CD-8202, **HO-OO Poster #2 French/German**. This will be a small full-color poster set for various settings. $3.50 retail. CD-328 is **Italian Commercial Signs** in 1/35th. These will be resin cast signs for all manner of Italian businesses and shops. 18 pieces, $8.95 retail. CD-142 is titled **Troop Shelter/Field Hospital**. It'll be a modern day sandbagged bunker, suitable for settings dating from Korea to the present day. $15.95.

September's line-up includes CD-329, **French Commercial Signs**. This will be similar to the Italian set and will contain 20 resin-cast business signs for $8.95. CD-330 is **Shower Stall**, a single structure with a sandbagged roof. Again, suitable for any modern setting. $8.95.

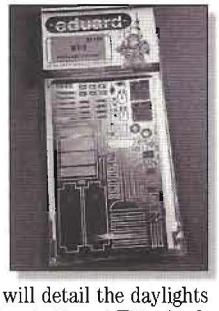
October items are CD-143 **Command Bunker**, a 9-piece ceramic and resin multi-period structure for $16.95, and CD-331, a resin cast **Outhouse** for $8.95.

For more information on Custom Dio products and ordering information, see their ad on page 36.

Eduard Model Accessories

Eduard has a whole flurry of new sets available. No flies on these guys. Here's the run down.

35103 is for the **Italeri M163A1**. It's composed of parts for the exterior of the vehicle and it retails for $14.99. 35104 is also for the **Italeri M163A1**, but this time it's an extensive set of parts for the interior. Yep, yep, yep. $19.99 retail. 35105 is an exterior set for the **Tamiya Sdkfz 7 8-ton half-track**. $14.99 retail. 35106 will create the interiors of the tool boxes and the lids also for the Sdkfz 7. $14.99 (trés spiff!). Set 35107 is for the **Italeri/Zvesda BT-5** and it retails for $14.99. 35108 gives the **VM Valentine** kit a boost for $14.99. This should make an already keeno kit even keener. 35109 will detail the daylights out of the **AFV Club M35A2 kit**. This set also includes those great little clear acetates for the truck's gauges. Again $14.99. Number 35110 will detail out the exterior of the **Tamiya M2 Bradley Fighting Vehicle** for $14.99. 35111 is the flip side of that story, containing everything you always wanted (but were afraid to ask) for the M2 interior. Gauges too. We like this trend, especially for $14.99. 35112 is designed for the old **Italeri/Peerless Steyr RSO kit** (still a great model after all these years). The standard $14.99 also gets you those acetate gauges. And lastly, number 35114 is for the **Italeri Horch command car** (gauge-o-matic). $14.99.



For more information, check your local shop or Eduard at 49 Fair Oaks Circle, Nepean, ONT K2G 4W3. Tel. (613) 224-9071. Fax (613) 727-5288.

Floquil

Hey—Floquil's making airbrushes! The Floquil company, famous in both song and story, has specially designed two new airbrush packages. One is a double action brush (meaning you can alter the width of the paint band as you spray) and the other is a single action brush (meaning you must alter the band width by manually adjusting the needle). These tools are called Precision-Flo by Floquil.

Both brushes are of all metal construction, like a traditional brush, and have a very solid feel. Both are made from solvent resistant components and are suitable for use with the entire range of Floquil/Polly-S products.

The two brushes each come packaged as a set. The double action brush comes with a six-foot braided hose, hanger (for your bench), 2 half ounce mixing bottles, jar top and siphon tube, a 1/4 ounce color cup and the standard wrench. This is number 669200 and the suggested retail on it is $119.00.

The single action set-up includes a six-foot plastic hose, hanger, jar top & siphon tube, a 1/2 oz. mixing bottle and the wrench. This one's number 669100 and it will retail for $79.00.

The brushes both carry a five-year warranty against factory defects, which we feel is an awfully friendly way to sell a product. We'll be road testing both these babies and we'll keep you up-to-date as we subject them to our merciless scrutiny (or something like that).

If you'd like more information on these or any Floquil product, contact Floquil-Polly S Color Corporation at 4715 STHHWY 30, Amsterdam, NY 12010-7417. Tel: 518-843-3610. Fax: 518-842-3551.

Hobby Bounties

Hobby Bounties, who bring you the old/new Bandai 1/48th scale kits have announced two new kits from the manufacturer, Zhengdefu of China. The kits are both 1/48th scale and they are the **Marder modern German APC** and the **Israeli Merkava MBT**. We're not certain if the kits are new tooled or not. We can't recall these subjects in the old Bandai line-up—they may be ex-Tamiya. Both are set-up for motorization and contain rubber band type tracks. In spite of the fact that they are configured as such, the tooling is pretty decent for the scale. The two kits each retail for $19.98 and an extra 40% buys airmail postage, while 15% will get you surface.

Full ordering details for Hobby Bounties can be found in their ad on page 9.

Hudson & Allen Studio

In addition to their new Russian farm structures (see ad on page 29), H&A has been busy brewing up a bunch of other new items.

The first is called **Detailing Solder** and it is a simple small package containing .010, .020 and .030 thickness solder. There is ten feet of each type and the set retails for $8.95. This is available right now.

In keeping with their theme of giving us all the elements in 1/35th scale, August will see the release of **Snow and Slush**. These will be similar to their earlier Mud product. You can add water to the mixture or use it dry. This is a good thing.

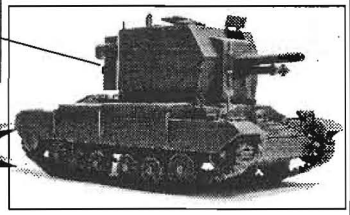
Also coming in August is **Red Clay** for Southeast Asian scenes, and **Asphalt** which will be another "just add water" product to pave all your miniature roadways.

And last, but not least, is **Lace Curtains**. These will be miniature laser-cut curtains for all those 1/35th scale buildings.

No word on the retail of any of these items, but H&A stuff is known to always be on the reasonable side.

continued on page 8

VM CO. LTD. from Russia 1/35 Scale



NEW

Bishop SP Gun **complete interior detail**
A6-ZV359504.....**$20.98**

NEW

Valentine IV Mk.III **WWII British Infantry Tank**
A6-ZV359503.....**$20.98**

BIG! ACCURATE ARMOR FROM SCOTLAND

NEW

1/35 Scale

Over 6 feet long!

"Truly one of the BEST kits we've seen"

A6-AT6001.....**$599.95** German U-Boat Type VIIc **74" long, waterline resin hull and conning tower plus white metal and etched fittings. Full instructions and decals included. Museum Quality.**
A6-AT4514.....**$499.95** European U-Boat Quayside **Full resin kit that includes a mooring and gangway set plus defence bunkers and stairway pieces.**

RPM from Poland 1/35 Scale Injection Molded Plastic

NEW

OT-26 **WWII Flame Thrower Tank**
A6-MK35010.....**$20.98**
T-26A Light Tank **WWII**
A6-MK35027.....**$20.98**

NEW

T-26/BT-2 Light Tank **WWII**
A6-MK35034.....**$20.98**
PzKpfw TKS(p) & Ra 43 Puppchen
A6-MK35041.....**$20.98**

AER from Russia 1/72 Scale

NEW

NEW

ZIS-5
A6-ZA7201.....**$10.98**
ZIS-5 Automobile
A6-ZA7202.....**$10.98**

TOGA from Moldova 1/35 Scale

Sale

T20 Komsomolyets **Artillery Tractor**
A6-TB3501.....**Sale $13.99**..~~$19.98~~
ASU-57 Airborne Tank **w/individual track links, mkgs for USSR & Egyptian Military Force**
A6-A6TB3502.....**$26.98**

TAMIYA from Japan 1/35 Scale

NEW

Wespe German Self-Propelled Howitzer
A6-TM35200.....
.....**Sale $31.99**..~~$39.00~~

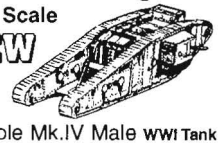
ALAN from Russia 1/35 Scale

NEW

Panzer II Ausf C **complete interior detailing & photo-etched detail parts**
A6-ZV5004.....**$24.98**

EMHAR from England 1/35 Scale

NEW



Tadpole Mk.IV Male **WWI Tank**
A6-EM4004.....
.....**Sale $26.99**..~~$32.98~~

Sale

British "Male" Mk.IV **WWI Tank**
A6-EM4001.....
.....**Sale $23.99**..~~$29.98~~
British "Female" Mk.IV **WWI Tank**
A6-EM4002.....
.....**Sale $23.99**..~~$29.98~~
British Medium A Whippet Tank **WWI British & German Mkgs**
A6-EM4003.....
.....**Sale $19.99**..~~$29.98~~

START from Russia 1/35 Scale

Sale

BA-20M **1936 Russian Armored Car**
A6-TB0001.....
.....**Sale $14.99**..~~$21.98~~

JMGT from France 1/35 Scale

Sale

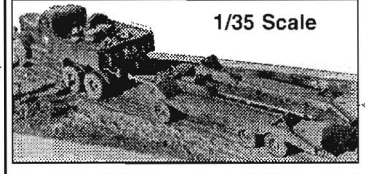
Charron CGV Armored Car **1906 Model, resin w/photo-etched & white metal parts**
A6-JT3501.....**$89.98**

PREMO from Russia 1/87 Scale

Sale

T-35/33 Russian Tank
A6-PZ0001.....
.....**Sale $5.99**..~~$10.98~~
T-28/35 Russian Tank
A6-PZ0004.....
.....**Sale $5.99**..~~$10.98~~

SCALE MODEL ACCESSORIES From England



1/35 Scale

NEW

Diamond T Heavy Lorry & Rogers Tank Transporter **complete resin kit, Limited Edition**
A6-SC2129.....**$299.95**

Squadron Mail Order

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2				
3				

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USA-APO-FPO
Minimum Postage-----$3.50
$20.00 to 49.99--------$4.00
$50.00 and up----------$4.50
Canada
Minimum Postage-----$6.50
$20.00 to 39.99--------$8.50
$40.00 and up---------$11.50
Foreign
All Other Countries 30% of Order ($7.00 Minimum)
Payment in U.S. Funds Only

Item SubTotal	
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☐ NEW ☐ RENEWAL Catalog Subscription	$4.50*
Grand Total	

* Squadron Mail Order Catalog Subscription Rates
U.S. and APO/FPO Addresses: $4.50/Year includes Catalog & 12 Supplements
Canada & Foreign Countries $7.00/Year ($4.50/Year where supplements service is not available)
Supplement service not available to all countries. Write for availability in your area.

Jaguar

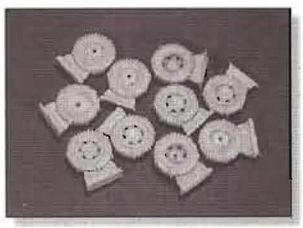
As an obvious follow-up to their earlier Jagdtiger interior, Jaguar has announced another set for the **Tamiya King Tiger**. The Jagdtiger set is super, so we look forward to seeing the King Tiger set. We believe this will be the only one available since the Panzer Concepts one disappeared a few years ago. The interior will be stock number 63512 and it will retail for $39.98. Look for this soon.

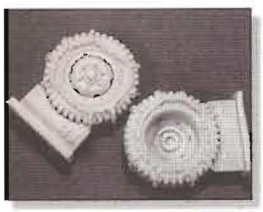
Other new items for the late summer and fall are 63510, **Road Sentry w/Gate** ($15.98), 63511, **Sherman Hedgerow Cutter** ($9.98), and an **Easy "Easy-Eight" hull** for $9.98.

Look for Jaguar items at your favorite hobby shop and mail order outlets throughout the U.S. In the UK, the line is handled by Cromwell Models.

Kendall Model Company

The highly talented team of Willy Peeters and Jef Verswijvel continue to develop the armor line of their new company. New items are 35-2004, **GMC 2 1/2 ton snow-chained 9 x 20 inch wheel set**. A 10-piece set for the Italeri GMC. Correct size tires and wheels with exquisite snow chains to get your GMC though those miniature snow drifts. This set retails for $16.99. 35-2006 is the same set minus the snow chains for $14.99. A spare wheel is also included in this set. 35-2005 is a set of tires with snow chains for the **Tamiya series of M3 half-tracks**. This retails for $5.99.





A new diorama item is 35-8004, **Classroom Furniture Set 1**. This contains a platform, desk and other accessories to create the interior of a European school room. A subsequent set will complete the interior with chairs and student desks. Nifty idea.

There are four sets planned to update or convert the **Italeri 105mm howitzer**. The M2, M101, M6 3" and Vietnam versions will all be available. Each kit will be a combination of photo-etched and resin parts. Prices and release dates are all TBA.

KMC has a lot of excellent ideas in the hopper. We highly recommend you keep a eye on these guys. For more information on their products, contact Kendall Model Company, 16115 SW 117th Avenue, Suite A-23, Miami FL 33177.

The Master's Hobby Supply

Master's has introduced a brand new decal sheet. Somewhat of a thematic switch, this time around it's **U.S. Army Armored Division Tank Markings Set** (take a breath) **1944-45 European Theater**. This is one elaborate deal here dudes. First of all, it's big. 9 x 12 to be exact and it includes hundreds of correct Division and Battalion codes for your next project (and the next, and the next...).

The great part about this aspect of the sheet is that all the codes are already arranged, so there's no cutting up dozens of teeny weeny numbers and getting them stuck to the end of your nose.

The sheet (sheets actually, there's a smaller one included, too) also contains both types of stars, tactical markings, blue/gray registration numbers (tons) and even markings for specific tanks. Some of these are based on artwork from the Concord book: *The M4 Sherman at War*, as well as a few generic examples.

And if this isn't enough, the whole deal comes with six pages of instructions to make sure you get your deckle where you want it. All this for the low, low price of $11.00. Not too shabby.

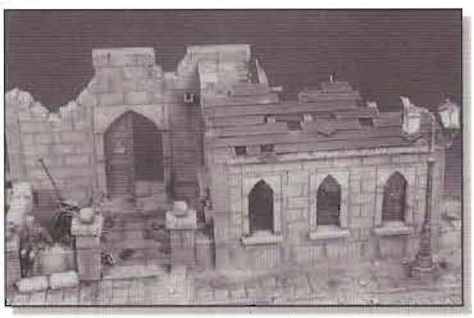
The Master's produces some of the thinnest water-slide decals we've ever encountered. If properly applied, they well and truly "disappear" against their backgrounds.

This current sheet and many others can be purchased directly from The Master's Hobby Supply, P.O. Box 81484, San Diego, CA 92138-1484.

Royal Model

Now listen here. We pride ourselves on being some of the nosy bastards this side of the Alleghenies. But look what happens. We go to Folkstone earlier this year and find a neat little company we've never even heard of. We were at first hesitant to mention them due to the fact that they have (as of yet) no U.S. distributor.

Royal Models produces a whole slew of great little armor accessories and detail sets. There is a line of building ruins too.



There's way too much to list, but we cuffed a few of the pieces and here's a brief sampling. Item 048 is a **photo-etched template** for masking off various kit wheels. The circles in the template are numbered and correspond to a printed list of kits that range from Panthers to Shermans. Great idea!

Number 088 is a set of **German fender pole markers**. The marker poles are resin (believe it or not) and the set includes photo-etched base plates and mirrors. The line continues with items like photo-etched guard rails, photo-etched screw heads, Tiger II and Tiger I fenders, photo-etched workable hinges and on and on.

There is a super line of super detail sets that all contain a good sized hunk of photo-etched brass and a handful of resin bits. Many, many of the current run of plastic armor kits are represented, such as the **Italeri Panzer Werfer** (this one's phenomenal), **Panther, Jagdpanther** and the **Tamiya Tiger I and II** (stock numbers here are 074, 095, 100, 026 and 028 respectively). Everything has a very "Verlindenesque" feel to its presentation and molding. Really excellent stuff.

We don't want to get you too excited—as the availability of the line in North America is still up in the air.

They have a very nice selection of catalog sheets and for information contact: Royal Model, Via Federico De Roberto, 65-95039 Trecastagni (CT) Italy. We also have an address for a UK distributor: Seaway Marine Associates, Ltd., 15 North St., Bere Regis, Wareham, Dorest BH20 7LA. Tel/Fax 01929 471342. If there's enough inquiries, perhaps we'll see the line stateside before too long.

The Show Modelling

TSM has added photo-etched set 083 to the line. This is for the **DML Jagdtiger** (both versions). Retail is $23.50. Number 086 details the DML/Gunze/Revell StuG II G. This should be a good one, as their set for the StuG B is a stunner. $20.98 retail.

Another zimmerit set is offered, this time it's the **waffle pattern for the late StuGs**. This can be adapted to work on all the later version kits. $29.98.

Squadron Mail Order

SMO has allowed us to peruse some of the latest items from their eastern European manufacturers.

First up is AER. They are offering an 1/35th scale **ASU-57 airborne assault gun**. This is the unusual little popgun used by Soviet paratroops in the fifties and sixties. An interesting little vehicle. The kit is a bagged item, but it is fairly complete with competent looking tooling, link-to-link tracks and a set of decals for both Soviet and Egyptian markings. $13.98 takes it home. Kit number ZV0003.

AER also offers two versions of the ZIS truck in 1/72 scale. One is the **ZIS-5** (ZA7201) and the other is the **ZIS-5V** (ZA7202). The V model differs by having squared off fenders. Both kits contain adequate instructions and come in colorful boxes complete with marking information.

All the new Alan items are in stock. This includes the **Wespe** (ZV5005) and the **Panzer IIC** (ZV5004). It's tough to compare the Alan Wespe with the Tamiya kit, but for the price ($24.95) you do get link-to-link tracks and many of the same features. The Panzer II (also $24.95) is currently the only game in town. Both kits reflect a level of tooling that hasn't been seen before in kits from Eastern Europe. It puts us in the mind of earlier Italeri efforts.

Emhar has another WWI subject, the **Tadpole**. This is an extended version of the British Mark IV tank developed towards the end of the war. The kit is all styrene and comes with hard rubber tracks. Stock number EM4004, retail $32.98.

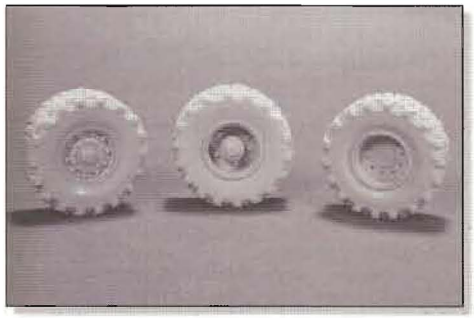
The Polish company Mirage offers another version of the T-26/7TP chassis, this time the **OT-26**

flame-thrower tank. This is the basic T-26 platform mounting a smaller turret and flame wand. This is item MK35010 and it retails for $20.98.

For information on how to contact SMO, see their ads on pages 7 and 18.

TAC Scale Dynamics

TAC Scale is a brand new company producing resin cast accessories. So far the offerings are of a modern nature. We have seen three of the items: 35001, **LAV-25 tires** for the Italeri or ESCI kits, $16.95. 35002 is also a set of replacement tires for the **Italeri Big Foot** kit. $16.95. 35004 is a terrific looking drop-in engine module for the Academy series of HUMVEE kits for $14.95.



Everything was very cleanly cast with no bubbles or other imperfections. A great first effort. For more information, contact them at 19-2 Summit Street, Framingham, MA 01710-7362. Phone: 508-879-0857. Fax: 508-620-5542. E-mail: TACDYNAMIC@aol.com

The Testor Corp.

Testor is now producing a highly useful **spray booth**. This new tool joins the ever growing family of airbrushing supplies and gear now offered by Testors.

The unit is good sized, measuring 20 x 14 3/4 x 15 inches. It's design is rather novel. Constructed of heavy gauge metal sheeting, it uses a three stage filtering system that is installed in the bottom of the unit. The "three stages" in this instance are three filters which paint is drawn down into by a strong fan. The fan is mounted in the bottom of the unit and the thing really pulls some PSI (keep an eye on pets and small children when you turn it on). The top lifts off for access to the filters. The top also contains a Plexiglas opening and two mounting hooks for a florescent lighting fixture.

A pretty handy little item we'd say. It has the look of a tool that will last a good long time. The suggested retail on the spray booth is $375.00. Look for this at your local hobby shop or for more information contact The Testor Corp. at the address listed on page 19.

(continued on next page)

Tamiya's new Jagdpanther and Type 90.

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All the above kits are retailed at US $19.98 each. Postage by surface mail is 15% value of the kit, while by airmail is 40% value of the kit.

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Tamiya America

Always the sly ones, Tamiya will be sneaking a few kits in this summer. The first is the **Jagdpanther**. An obvious choice to follow the earlier Gs (what took them so long?). This kit will come with a gun breech and two different exhaust configurations. The stock number is 35203 and it's available right now. $45.00 retail.

Not too high up on the list of desired kits is the new **JGSDF Type 90 MBT**. This is the most modern tank in the Japanese arsenal. The kit should be pretty though—being all new tooling of the most advanced Tamiya type. It'll come with two figures, too. Look for number 35208 in late summer for $45.00 retail.

(Anyone else notice that these two kits are cheaper than usual?)

A fascinating **Russian infantry set** is due in August. It will be twelve screaming maniacs all in the process of leaping off a tank and running away. Look for number 35207, $18.00 retail. Early reports state that the figures will all fit onto a T-34, but we wonder if this could mean something else Soviet in our future? You didn't hear that from us.

You ain't nothin' unless you accessorize. To that end we have **German Infantry Equipment Set A**. Equipment and other gear for the well-dressed early and mid-war grunt. Number 35204. Retail $5.00. **German Infantry Equipment Set B**, handles the latter part of the war. Number 35205. Also $5.00.

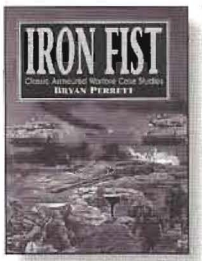
Let's not forget our U.S. pals. The **U.S. Infantry Equipment Set**, number 35206. We're guessing that it will be that super sprue that was included in the previous U.S. Infantry set. This item will also retail for five beans.

Some future projects are another version of the **Panzer IV—the H**. This will be just a slight mod of the earlier J model. It looks like it will include the side skirts this time. Another "down the road" project is the **Churchill Mark VII**. We believe this is the same kit as the old Crocodile flame-thrower kit, minus the trailer, etc. No word on if the kit will be updated or not. Three new figures are slated to be in the box when it hits. Both these kits are stated to be strictly TBA, so precise information will not be available for some time. If we were to guess, we'd say late '96 or early '97.

As always, Tamiya can be contacted via their product hotline: 1-800-TAMIYA-A between 9 and 6pm PST.

Book Reviews

Iron Fist
By Bryan Perrett.
Arms and Armour Press.
London, 1995.
£16.99



This 222 page hardback is subtitled "Classic Armoured Warfare Case Studies," which is a bit of a misnomer since the battles described are hardly presented as "case studies." However it is a great read that is full of interesting details and information on some of the great and lesser armored land battles of the 20th century. World War I and II are the main thrust, although several of the last chapters do go on to later times. The author's British slant shows frequently but does not detract from the thrust of the book, which is to show how lessons learned on the battlefield of one war lead to innovations in following armor encounters. He did manage to avoid talking about the U.S. Army except for the Battle of the Bulge and he avoids Korea entirely.

The first three chapters describe battles in WWI including a look at the use of armored cars and some neat discussion of the use of the Whippet tank. The next nine chapters cover WWII battles starting with Gembloux Gap and Flavion and ending with a quick look at the use of armor by the Japanese. The last three chapters cover, in order, the Israeli Sinai Campaign of 1967, a very brief look at Vietnam, and a short piece on one action in Desert Storm.

We found this one to be a good read, with lots of tidbits popping through that will have the diorama builder intrigued. The photo section in the middle of the book is short but the pictures are good, some even new to us. In summary, Mr. Perrett's book is a good distraction from painting your fingers OD, so it comes with our recommendation.

Ground Power
March 1996 (No. 22)
Delta Publishing
Soft cover, 152 pages,
B&W throughout.
$32.98

Ground Power
April 1996 (No. 23)
Delta Publishing
Soft cover, 148 pages,
B&W and color.
$32.98

Ground Power
May 1996 (No. 24)
Delta Publishing
Soft cover, 144 pages,
B&W throughout.
$32.98

Remember Tank Magazine? Tank Magazine was published by Delta Publishing for a number of years and it gradually developed a reputation for being an excellent journal for the armor plate afflicted. The content was usually two or three modern vehicles showcased in full color, and one or perhaps two historical perspectives on older AFVs in black and white. TM was one of the only places you could find good pix of Soviet stuff back in the late eighties.

The big drawback of the publication was that it was entirely written in Japanese (not a problem if you happen to be Japanese). This didn't stop the truly geeky from scarfing these issues up whenever possible.

Tank Magazine was also responsible for the Sturm & Drang series of books. These were part of a whole range of Tank Magazine Specials which covered a huge array of subjects. There were specials on campaigns of WWII and on various vehicle types. S&D covered the Germans with the series running through the Tiger I, Panther, Panzer IV, 251/250 Halftracks, Sturmgeschütz, and Panzerjäger. The good part about the specials is that they are light on text and very heavy on crisp, clear photos—many of which are ultra rare.

Now some of these specials are still available, but what we came here to tell you about was Ground Power. The Ground Power series is the result of all of the above mentioned publications. Delta has taken the concept of the "special" issue and blended it with the idea of its regular publication. The result is a monthly booklet that is overflowing with terrific photos. Each issue is of a different subject and each contains either color profiles or detailed line drawings. To date there have been twenty-four issues published and more are on the way each month.

We've been hesitant to review these books because up until recently availability has been spotty. This is starting to change now and more and more hobby shops and mail order outlets are beginning to stock them. They remain on the pricey side, but all this subject matter in one place can really be worth it.

Ground Power Number 22 covers WWII German Experimental Vehicles. German fans are explicitly instructed to at least attempt to control themselves while we describe the contents. Between its two thin covers, this book contains just about every photo we have ever seen or heard of on the subject of the weird and wacky German stuff. It's all here, Nebelfahrzeug, Panzer I and II experiments, unusual SPGs, the super heavies (Maus & E-100), Karl Mörser, and the late war flak platforms, to name just a few (really!).

There are one or two curves in here, too. Two additional pictures of a destroyed Maus (one quite clear), a 12.8cm VK3001(H) apparently in service with tactical markings, and a very bizarre variant of the 8.8cm Pak 43 Waffenträger. We guarantee there's something in here you haven't seen before.

Number 23 covers the German 4th Panzer Division with dozens and dozens of "in action" type shots. Most of these shots concentrate on the Kurland battles during 1944-45. There are heaps of great uniform shots as well as good coverage of Panzer grenadiers. All of the weapons and equipment look pretty well maintained. Surprising when one considers the date of the photos.

One other interesting aspect of No. 23 is the center section of Knights Cross holders—in color. Pretty rare stuff.

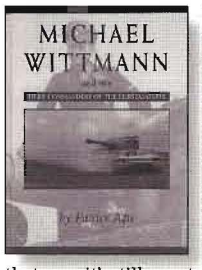
Ground Power Number 24 revisits the Panther. This is more or less a repeat of the earlier Sturm & Drang volume. However there is quite a bit more coverage of the earlier types, especially the A. There are several shots of Panther As in Italy which are new to us. The rear third of the book contains information on the development of the Panther and it is supplemented with several excellent line drawings. These are overhead three-quarter views and all the small differences are highlighted.

The original S&D was superb. Many of the photos are super rare, so this book is very worthwhile.

The only drawback of any of these books that we can see is the Japanese captions. Obviously this makes identifying your favorite subject a little tough. Fortunately many of these subjects have been covered in English language books so the Ground Power series can stand as a excellent supplement to other titles. The fact that Delta digs so deep in their research is going to continue to set these books apart.

We keep you tuned in to all future titles in the series.

Michael Wittman and the Tiger Commanders of the Liebstandarte
by Patrick Agte
J.J. Fedorowicz Publishing
Hard cover, 576 pages, B&W throughout.
$85.00



OH... DID YOU HEAR? YET ANOTHER mind-blowing book's been released on the Tiger. Yeah, that's right. It's practically an ordinary event now to see this kind of stuff appear on the scene. We used to have to be content with a few photos spread out across several different books. Even though books like this are no longer that rare, it's still easy to get fired up about their release.

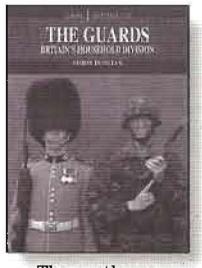
The title here is a tad misleading. While a good hunk is devoted to Wittman's career, the book really is a unit history of the Tiger company of Liebstandarte which later became the 101/501 Schwere Panzer Battalion. The book traces the history of the division in photos from their origins in 1942, through Kharkov, Kursk, Italy, Normandy, the Ardennes and finally Hungary.

As usual, the boys at Fedorowicz are not messing around. 700 photos give a very vivid account of the company through all its trials. This is accompanied by an excellent and concise description of the various battles and campaigns.

The sections on Wittman are pretty good, too. His career is well documented, from his early days as a StuG commander right through the fateful day of August 8, 1944. We were especially impressed with the sequence of photos illustrating the aftermath of the Villers Bocage. We believe this is the first time that many of the after action photos have been shown in order. It gives an especially chilling picture of the engagement. There are also several excellent shots of Wittman in Normandy that have never been published before. Some are dated late July and early August.

Another good one for the German armor fan—and another way to make your Allied and modern buddies jealous!

The Guards
Britain's Household Division
by Simon Duston
Windrow & Greene Publishing
Europa Militaria No. 20
Soft cover, 64 pages, full color throughout.
$15.95



ONE OF THE SIGHTS THAT'S NOT TO BE missed when in London is the changing of the guard. Three hundred fifty years of British military tradition is played out on a daily basis at Buckingham Palace and Whitehall. If you're lucky you may also see the glittering helmets of The Household Cavalry as they march and parade in the area.

The gentlemen wearing those bearskin caps, shiny helmets and scarlet tunics are all members of The Household Division of the British Army. As such they represent the cream of the British military. The specific function of The Household Division is to protect the Sovereign (you know—the Queen) and the Royal Palaces and to "provide escorts and guards of honor on State occasions."

Unlike the ceremonial units of other countries, these guys are genuine bad asses. The Guardsmen stationed at the palaces are fully functional troops. Armed with the current British L85A1 rifle, they're ready to respond at a moments notice. Members of the division also see duty wherever the British Army is currently deployed around the world. Many elements saw service in the Gulf War and more are currently serving in Northern Ireland and in Bosnia.

Windrow & Greene has given us yet another excellent full color snapshot of modern Militaria with this title. This amazingly brief booklet covers all aspects of The Guards role in the British military. All of the ceremonial aspects are covered, as are the many units in the field. There are some superb full color shots of Scimitars, Warriors and other AFVs in service with The Guards.

Indispensable to all you anglophiles out there and perhaps an indispensable addition to your kit bag on your next trip to London...

Models in Action No. 2
Berlin 1945
Dai Nippon Kaiga Co., Ltd.
$43.95

THIS IS THE SECOND IN A series of books that illustrate famous battles of WWII with dioramas. The first was on Normandy and this second continues the theme with hundreds of beautiful full color photos. There are eleven different dioramas by some of the most talented modelers in Japan. Each piece showcases a different aspect of the final battles and the dios are certainly something to behold. The level of skill throughout each is most impressive. The photography too, is outstanding. The opening shot of the first diorama is possibly one of the best model photos we have ever seen.

All of the pieces maintain this level of quality. They all are extremely well researched. There are dozens of great little uniform, vehicle and weapons details that reflect the very late war period.

The dioramas are arranged roughly chronologically,

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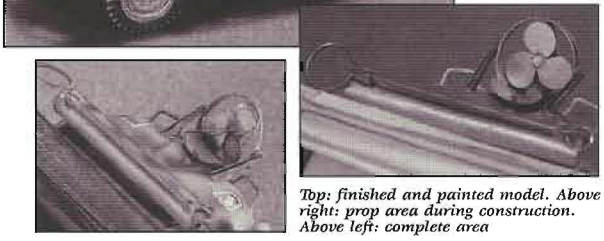

Top: finished and painted model. Above right: prop area during construction. Above left: complete area

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beginning with the attempted retaking of Budapest by the 1st SS Panzer Regiment and ending with Soviet tanks rumbling through the streets of Berlin. All but three of the dios are in 1/35th scale. The remaining pieces are in 1/24th and 1/15th scale. This makes for some very interesting looking models.

There is a rather novel little theme to each of the dios. In each the fictional character Leutnant Helmut Schmitt is described as his brief military career takes him across the four corners of the final battlefield (this guy really gets around).

The figure work is the most interesting aspect of each of the scenes. Some contain over forty-five different miniatures. You'll spend hours pouring over the photos, picking out the various products and accessories. Great inspiration!

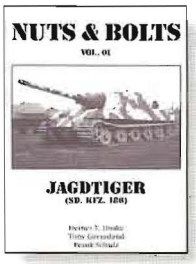
Like the previous book, this one has very competent English translations for most of its length. This starts with an impressive introduction and includes all of the photo captions.

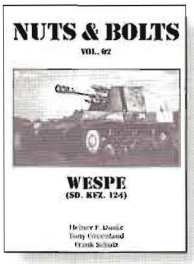
The back end of the book illustrates all of the construction phases of each scene. Unfortunately, this section has not been translated into English. This is probably what many of you would be most curious about (we were). The saving grace is that this section is ultra long on photos illustrating the progress of each model.

We highly recommend this title to anyone who aspires to create that diorama masterpiece. Although expensive, you'd be hard pressed to find this much visual information anywhere else. Go get one.

Nuts & Bolts Vol 1
Jagdtiger (SD. KFZ. 186)

Nuts & Bolts Vol 2
WESPE (SD. KFZ. 124)
By Heiner F. Duske, Tony Greenland and Frank Schulz
Both vols. 36 pages, B&W throughout.
$20.00 each





These two new detailing booklets are the result of a few modeling buddies getting together and saying "let's make some cool books."

And so they have. These two books are full of dozens of close-up shots of surviving museum vehicles. The JT volume covers the Bovington, Kubinka and the Aberdeen vehicles. The Bovington example is of special interest because it is the Porsche version.

The vehicles in the Wespe volume are not all specifically identified, but one is the Kubinka vehicle. The photos here tend to be a bit clearer and the vehicles are generally in better shape than those in the JT book. A fair amount of good clear shots of the fighting compartment appear here, too. The Wespe volume also includes a set of 1/35th scale plans on the back cover.

Not a bad effort for first-time publishers. There is a definite improvement from the first to the second volumes.

Twenty crisp greenbacks gets you a copy of either. Send your scheckles to: Frank Schulz, Müllerstraße 6, 29525 Uelzen, Germany. The price includes shipping and handling. If you do send cash, make sure it's securely tucked into safety envelope. Registered mail might not be a bad idea either.

Panzertruppe
Ryton Publications
by Uwe Fiest and Thomas McGuirl
Hard cover, 278 pages B&W and color.
$65.00

How's this for an idea: a book giving the complete soup to nuts pictorial history of the Panzertruppe. Leave it to Ryton. Panzertruppe joins the ever expanding list of titles from this prolific publisher. In this latest title the authors trace the history of the Panzertruppe right from its origins during the early stages of the Third Reich. A great variety of uniform details are shown though large clear wartime photos and full color photos of existing uniform examples.

Every detail you could wish for is here. Even examples of unit awards and decorations. All Heeres uniform items are covered as are Waffen SS and Luftwaffe (Panzer Division Hermann Göring). All versions of the typical Panzer crewman's uniform are touched on, including all the specialized versions of the SS camouflage clothing and the many different types of winter gear worn.

Mr. Feist has also thrown in a sprinkling of color plates depicting certain uniforms, including a cool portrait of Michael Wittman.

We liked this book a lot. It's great to have a comprehensive single source for all this information. This is yet another feather in Ryton's cap.

One last thing to note on the Ryton titles. They are by their very nature strictly "limited production." Like many of today's small publishers, Ryton goes that extra mile in regards to research and quality. But these types of books are never published in the kinds of numbers that the large companies do. The lesson here is: buy early. Some of the earlier mega titles from Ryton and Fedorowicz are now more and more difficult to find due to their limited numbers. Don't be the only one left standing without a chair when the music stops...

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35066 Waffen SS Wespe Crew (2 figs-cold weather dress)
35067 Waffen SS Wearing Overcoat & Blanket
35068 SS Stug Crew (2½ figs - firing MG, standing on rear deck pointing, ½ fig in comm. hatch)
35069 Waffen SS NCO Pair (SdKfz. 251/D)
35070 German Headset #7
35071 French Foreign Legionnaire - Bir-Hakeim, 1942

35072 British Warrior/Scorpion Crew/ UN/Desert Storm
54003 1/32 F-4 Phantom Pilot Set 1960-70's
16009 U.S. Infantry Europe 1944-45 Sculpted by John Rosengrant
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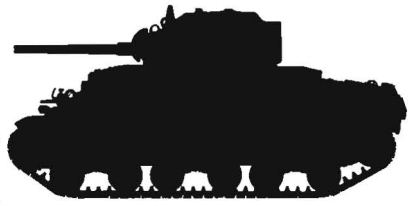
The Sherman Tank: A Fragmented Look



PART 4: SHERMAN SUSPENSION SYSTEM

by Pete Harlem

The M3/M4 medium tank series is often cited for its volute spring suspension system which gave both excellent cross country performance and ease of maintenance. The components of the suspension were designed to be easy to manufacture, to be reliable, and to be interchangeable as much as possible. The latter feature in particular meant a Sherman tank crew was never far from spare parts.

The track was driven at the front by toothed sprockets and supported at the rear by a relatively large idler wheel. The road wheels were supported on six suspension units called bogie trucks and, on early versions the track supporting return rollers were integral with the bogies. All these components underwent many changes during WWII production. Here we look at these parts to see what points are of interest to the model builder. As with other parts of this series, we expect to find more combinations beyond the ones shown here (and you should, too).

Drive Sprockets

Inherited from the M2 medium tank, the M3 had thirteen tooth drive sprockets. Each sprocket was comprised of a central drum shaped hub with identical toothed plates bolted to the ends of the hub. There were at least two forms of hub (differing only in the way the sprocket plate was supported) on VVSS tanks. There may have been two widths since the original tracks on the M3 were slightly narrower than all later M3 and M4 tracks. There was a wider hub used on the wide track HVSS suspended tanks. The sprocket plate could be fitted to any of the hubs and was held onto the hub drum by means of hex head screws. The hub bolted to the drive shaft with 8 screw-type bolts. I have identified at least 5 types of toothed sprocket plates. **Figure 1** shows those identified from photos.

Type 1A is the original form and it is easily recognized by the numerous dimples cast into the surface of the sprocket part. Looking very much like an ornate snowflake this type was seen on both the M3 and M4 series tanks. Type 1B has the same sprocket plate shape but is simplified by not having the dimples on the surface. Type 1C is similar to 1B but differs in having pointed tip ends where the attachment bolts go. Type 1C is very common on various versions of the Sherman. Type 2 is a revised casting with pointed cutouts and dimples at the tip of each cutout. This sprocket was very common on early M4 series tanks. Type 3 is the final form used with no cutout or dimple detail whatsoever and by 1945 this was the most common Sherman sprocket in use.

Not shown is the drive sprocket for the Canadian dry pin track used on some Shermans, Rams and derivatives built in Canada. This track had smaller pitch track blocks and therefore had more teeth than the U.S. sprockets.

The 1/35 kits we have to choose from provide one or more of the sprocket types. The Tamiya M4A3 (and Jumbo) has the type 3 sprocket. The Italeri M4A1 and M4A3 kits, and DMLs series of M4A4s all have both the type 1C and type 3 sprockets as a choice. The new Tamiya M4 has the same type 3 sprockets as the old M4A3 kit but also includes type 2 sprockets. The new DML M4A1 Sherman also has both type 1C and type 3. In HVSS the only choice is the type 2 that comes in the DML M4A3 kits which are installed on the wider hub drum. Type 1A or 1B sprockets have not been released in styrene—yet.

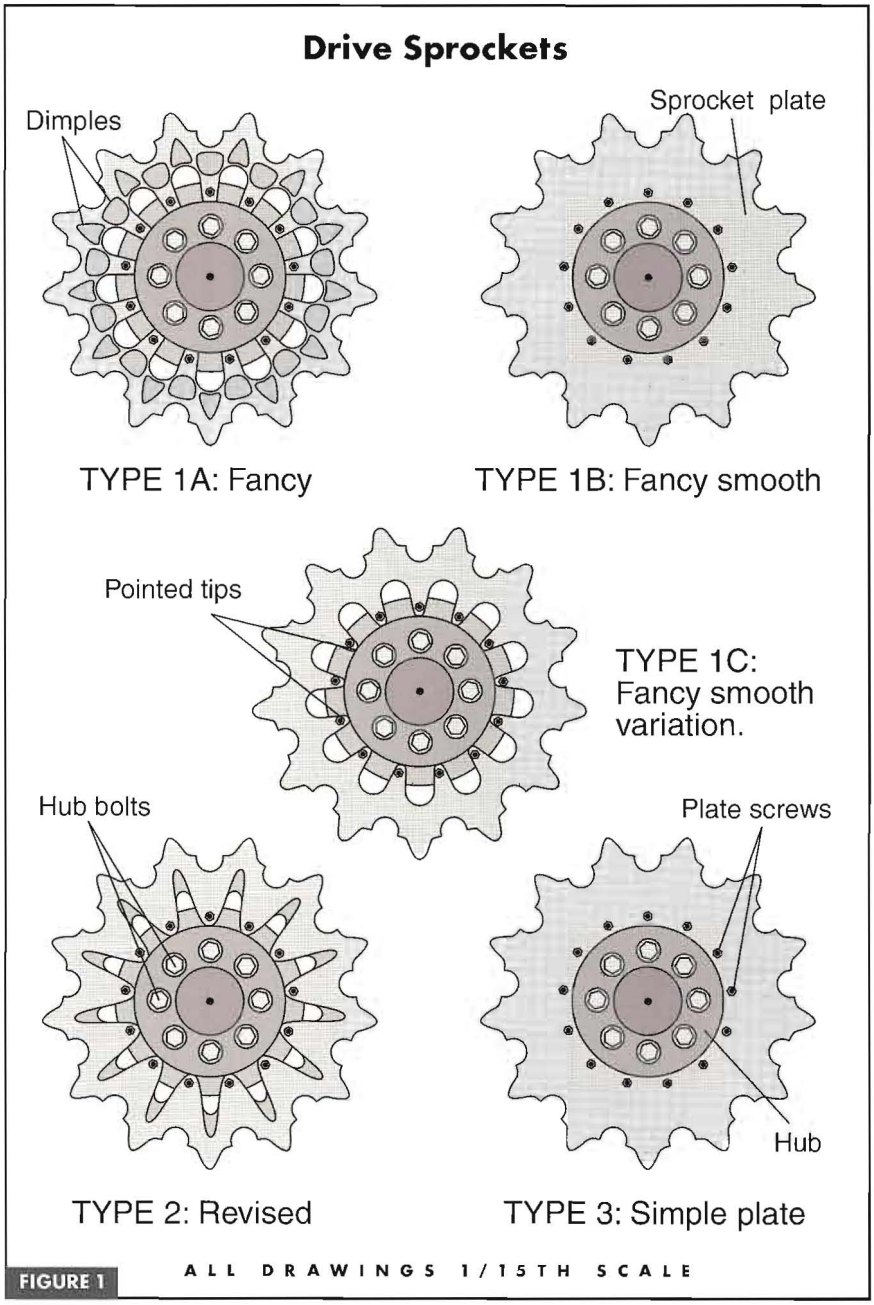


FIGURE 1

VVSS Suspension

The original suspension used on all M3s and most M4 series tanks was a type known as Vertical Volute Suspension System. The VVSS comprised six bogies with a pair of vertically mounted volute springs in each assembly and used track blocks with guide teeth on each end (see last issue). The road wheels were mounted singly between the suspension arms, two per bogie truck, and a single idler wheel supported the end of the track run. Return rollers were installed on top of the bogies.

Idler Wheels

The VVSS idler wheels were steel castings mounted on an eccentric shaft assembly that allowed the track tension to be adjusted. By turning a large hex nut on the eccentric, the idler shaft position was adjustable fore or aft to achieve the correct track tension. **Figure 2** shows the two types of idler

wheel used on VVSS Shermans. Each is 22 by 9 inches in dimension and both types have provision for greasing the bearings by means of a grease plug and relief valve. A removable dust cap is held on by small screw-type bolts and it protects the hub bearings from dirt and other contamination.

The original idler wheel was an open spoke design with six spokes. It is normally used in conjunction with open spoked type road wheels but not always. The solid spoke idler wheel is a later type and it was used on many types of tank. Both idler types look much like bigger cousins to the corresponding road wheel types. I also assume that both types were made with variations in casting details, but so far none has turned up.

The only comment I have on the kit idlers is to point out that none of the kits with the solid idler has detail on both sides. Both idlers shown here are identical on the other side but without grease plugs fitted, but you wouldn't know that from the kit parts. The new DML M4A1 kit includes two types of solid idler (with and without separate dust cap) that are hollow on the backside. It also comes with a third choice, the open spoked idler and these do have a rudimentary attempt at molding the grease plug. Progress.

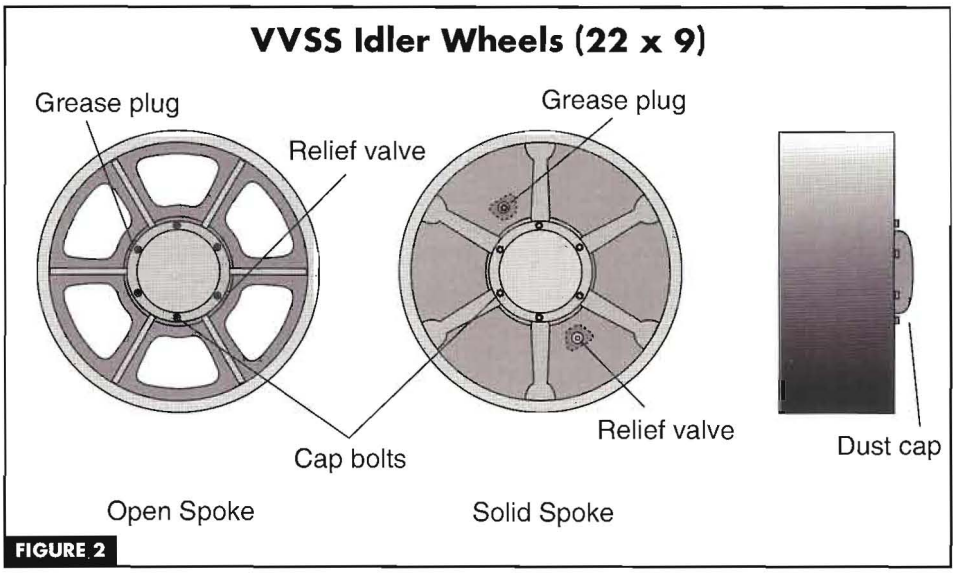


FIGURE 2

Road Wheels

The VVSS road wheels (**figure 3**) have rubber tires and are either cast or made from steel stampings. All forms produced had the usual grease plug and relief valve for lubrication, and all use 20 by 9 inch rubber tires, but other details differ. Tires had manufacturer names (not shown here) molded into the sidewall in a manner similar to car tires. Tire brands documented include Goodyear, Firestone, B.F. Goodrich, and Bear. Besides the company name, the sidewall contained size numbers (i.e. 20 X 9) and serial numbers. No Sherman kit produced to date includes this detail even though car models in smaller scales (1/43 for example) do include raised lettering on tire moldings as do 1/35th scale soft-skins.

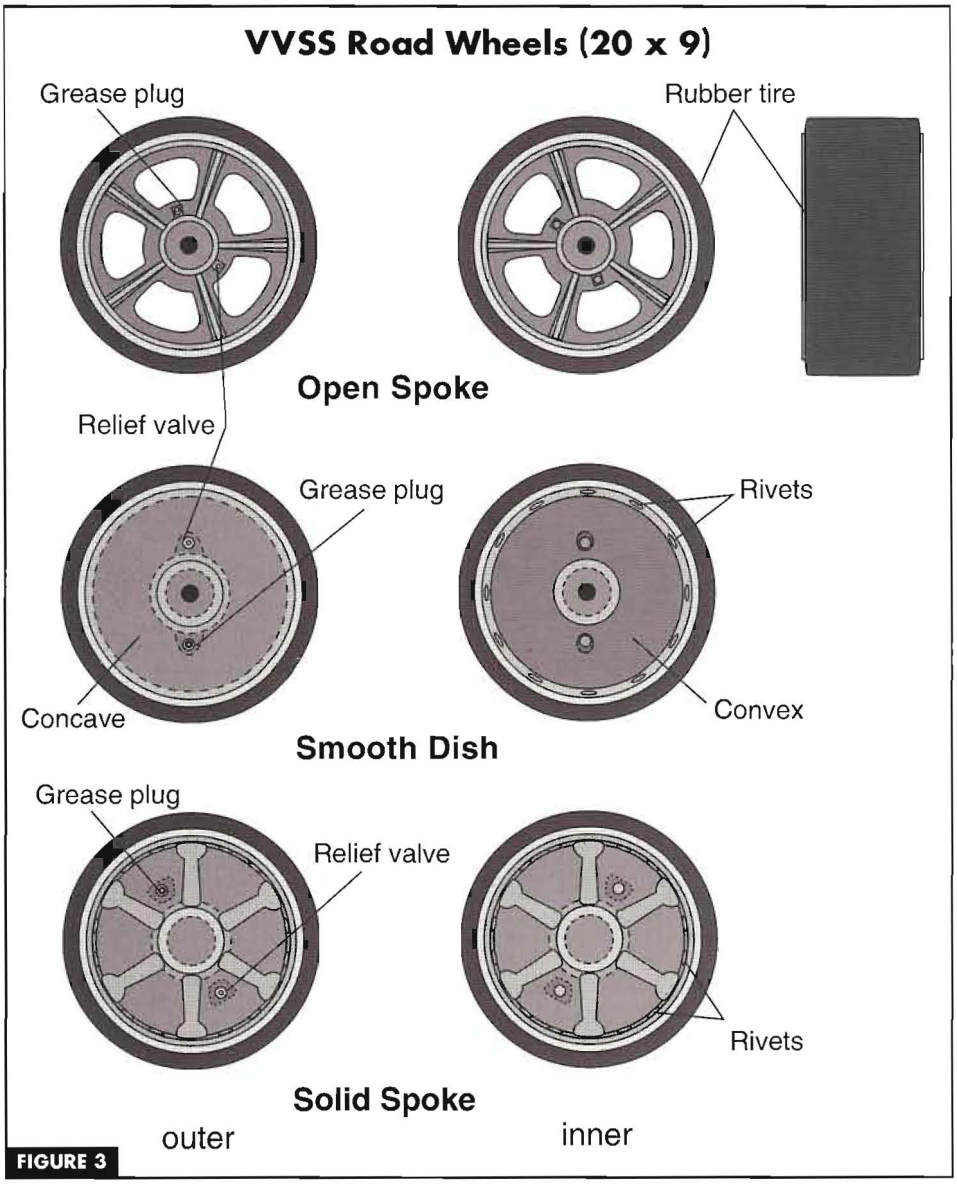


FIGURE 3

The first type of road wheel produced for the M2/M3 was the open spoke type with five spokes. The open spoke wheel was also used on early Sherman types and can be found on tanks throughout the war. The second type produced was the solid spoke with embossed spoke detail on the face plate. The stamped steel center of this wheel was riveted to the wheel rim and has prominent rivets inside the rim lip. The third type, a smooth dish type road wheel, was a simpler design with rivets only on the convex (inner) side. All the wheel types could be reversed but normally the dish type is seen with the concave side out. When wheels were mounted reversed, the grease plug and relief valve were installed on the outer face for ease of access.

There are no styrene kits which include the smooth dish wheels. The open spoke wheels in the Tamiya M3/Grant kit are wrong because they have six spokes. The open spoke wheels in the Tamiya M4 and Italeri based M4A1 and M4A3 hull kits have the correct number of spokes but do not have the grease plug/relief valve details. The open spoked wheels in the new M4A1 from DML do have a tiny nib to show the plug. The solid spoke wheels that come in the Tamiya M4 and M4A3 kits are too narrow but those in the DML M4A4 series kits are the correct width. Only the DML versions include the dimples with grease plug and valve detail on the wheel face. The Dragon's new M4A1 has solids also, these being a set of the same ones given in the M4A4 kits and an identical set of the same type on a new sprue. Go figure. While you are doing that, note that none of the solid spoke wheels in the above kits has correct detail on the reverse side. None includes the rim rivets either.

Several after market and resin kit companies supply examples of bogie wheels in resin or white metal. The smooth dish wheels are available by this route.

Bogie Trucks

The term bogie truck is derived from railroad technology. Many of the makers of American tanks

were previously in the railroad business so this comes as no surprise. With age, the term truck has been lost and we now tend to just call them "bogies." Each of the six suspension units bolted to the hull sides of the Sherman were two-axle bogies. There are two basic types of bogie used on VVSS tanks and another type on the wide track HVSS suspension that was introduced in November, 1944. **Figure 4** shows the evolution of bogie components.

The first bogie used on M3s and some very early versions of the M4 and M4A1 Sherman tank were the type 1 shown. These are easily recognized by the location of the track return roller on top of the suspension bracket. The two seven-inch diameter volute springs were housed vertically inside the bracket casting and each acted on one of the two suspension levers. The levers pivoted inside the bogie bracket and supported the suspension arms. Contact between the arm and the lever was by means of a rubbing block that was riveted onto the suspension arm. A small metal wall on the outer edge of the rubbing block kept the lever properly located. A second rubbing block was bolted onto the bottom tip of each lever, but it cannot be seen in this view because it hides behind the vertical wall part. The suspension arms were attached by means of gudgeon pins that provided the pivot points.

The second type of VVSS bogie truck was called "heavy duty" and incorporated a number of improvements. It had the return roller relocated onto a trailing arm bracket and a skid made of bent metal plate on top of the bogie. The bracket casting held larger eight-inch diameter volute springs and had more steel covering the springs and acting as an armor guard. The trailing arm for the return roller was bolted to the spring guard portion of the bracket by means of four bolts and could be attached at either side. This meant the bogie could be installed on either side of the tank once the trailing arm was installed properly. There are four prominent holes in the side face of the spring cover armor on the side of the bogie without the roller support bracket that are missing on all the kits. The holes are on the side facing the front on both sides of the tank. Finally, the levers, the suspension arms, and the gudgeon pin attachment points were all beefed up and revised on this type bogie.

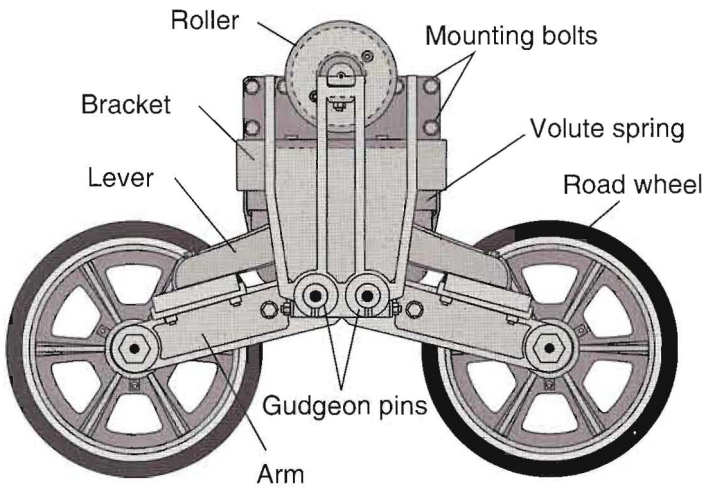
The type 3 bogie shown is the HVSS unit and it represents a total revision of the suspension trucks. The HVSS bogie includes single cast steel arms for each axle shaft with wheels mounted in pairs at each end. The springs are eight inches in diameter and mounted exposed horizontally in the middle of the bogie. A shock absorber (or snubber) tube connects between the two suspension arms providing an improved comfort ride not available in VVSS tanks. More on this system in a moment.

Type 1 Bogie Variation

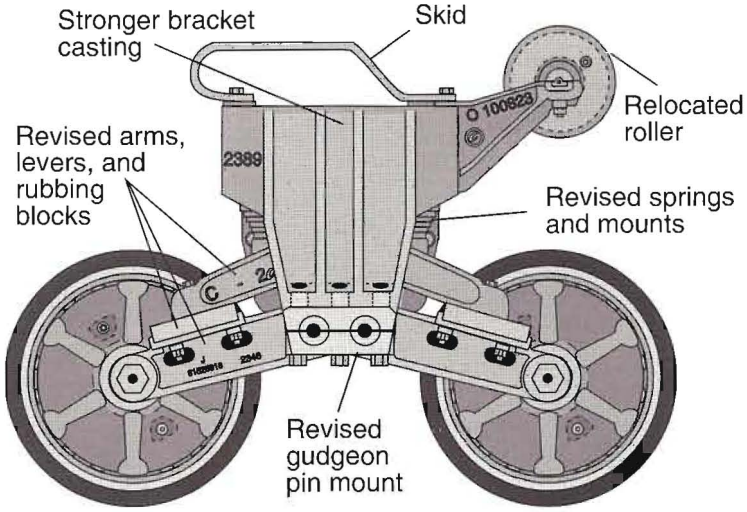
The original bogie type installed on the M3 underwent some changes during its production life. **Figure 5** shows both the initial pattern and what it looked like with all the later features.

The initial version had smooth-face lever castings with prominent mold seams around the perimeter. The roller was located low on the bracket and supported on top of the two central vertical reinforcing ribs. The steel roller had a grease plug and a relief valve on its external face for lubrication of the bearings. A pair of plugs on top of the bracket casting covered the spring mount hardware. The gudgeon pins were held in the bottom of the bogie bracket with clamp bolts and nuts and the pins had to be driven out sideways to replace

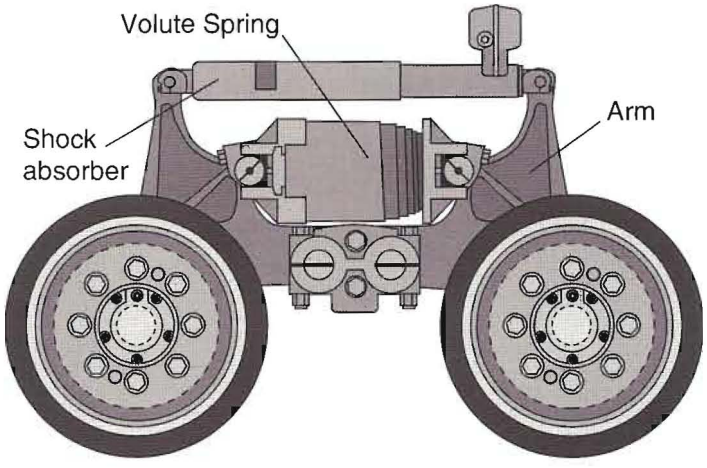
Bogie Evolution



TYPE 1: Original VVS (M2/M3/M4)



TYPE 2: Heavy Duty VVS (M3/M4)



TYPE 3: Horizontal Volute (M4)

FIGURE 4

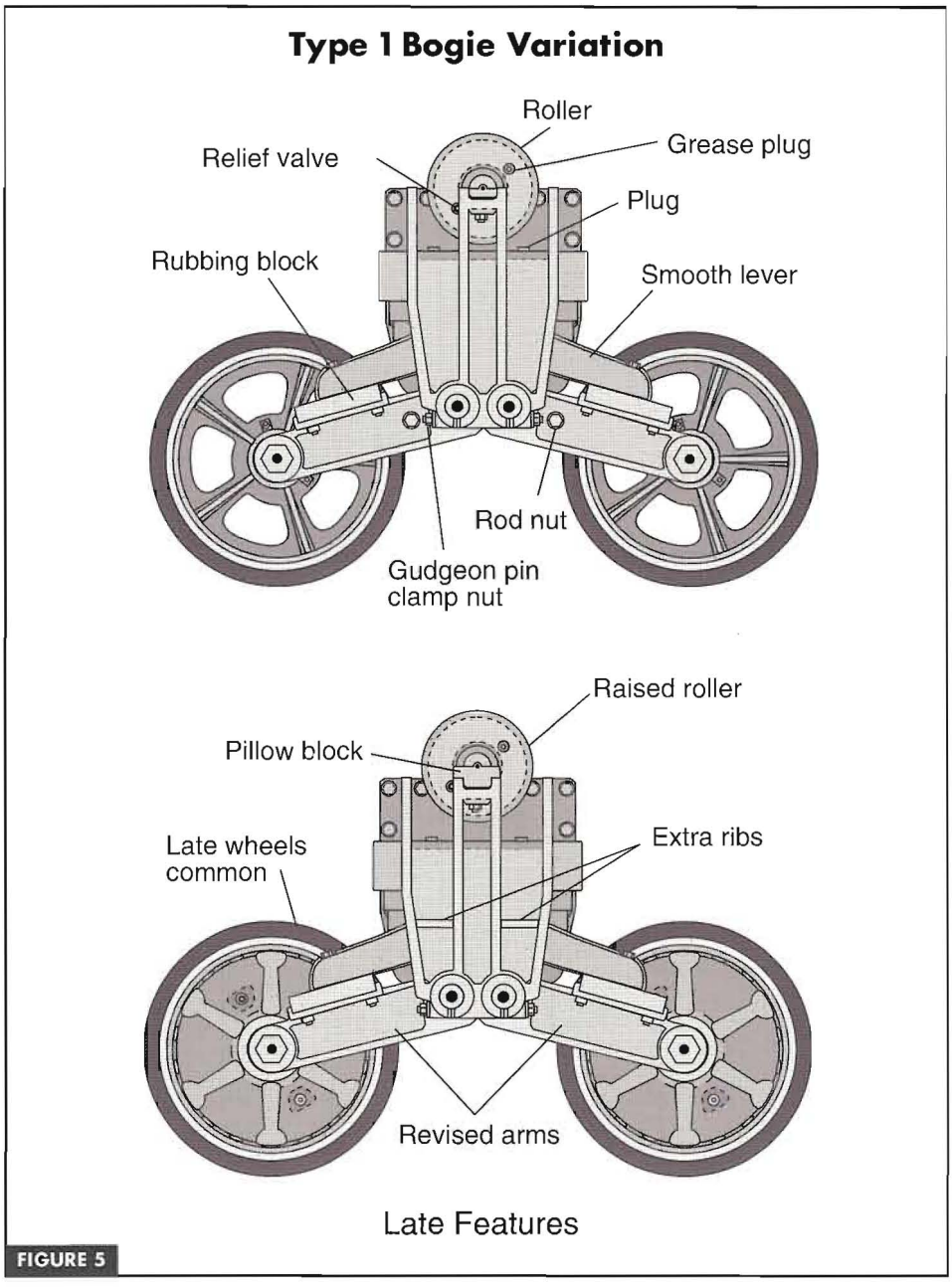


FIGURE 5

the suspension arms.

The second drawing in figure 5 shows some of the variations. Some bogie bracket castings had two horizontal ribs between the inner and outer vertical ribs. For example, a few of the U.S. M3s used in Algeria and North Africa used these castings. Other types of road wheels were also used.

On the original pattern suspension arms a rod bolt was installed between the arms for each wheel. This can be seen as a nut on the inboard end of the suspension arm. On later bogies, the arms will either have no rod bolt (the holes will be visible) or a second type of arm is used. This arm does not have holes for the rod bolt and instead is connected to the opposite arm on top by a sheet metal gusset (not visible here). The second type is shown at the bottom of the figure. A final change made to type 1 bogies used late in WWII was raising the return roller by installing a thicker pillow block. Apparently raising the track reduced thrown tracks.

Type 1 bogie trucks are only found in the Tamiya M3 and Grant kits. These are the initial version but suffer from not having correct detail on each side. There should be two cutout holes in the sides of each bracket just above the top of the spring guards. Otherwise they are representative. The wheels included in these kits are too narrow and of the wrong number of spokes so they should be changed if using these bogies. The Tank Workshop sells near copies of the Tamiya type 1 bogies (minus wheels) for use when backdating an M4 or M4A1 to this type suspension. They do not have the cutouts in the sides either.

Type 2 Bogie Variation

Figure 6 shows most of the identifiable variations in the second type of bogie truck. All of these share the trailing return roller and top mounted skid but other details vary. Also keep in mind that many of the details shown can be mixed and matched to other units so additional variations are to be expected.

The type 2A bogie was the first installed as a replacement for the type 1. Note the symmetrical skid used on top and the mold seam running across the face of the bracket. The lever shown is an improved type common to all type 2 bogies. This bogie was installed on early M4A4s but its use on other types is not well known.

The type 2B bogie had a different type of skid, now with a shape that had to be placed correctly depending on which side of the tank the bogie was installed. I also show the next pattern of suspension arm to be fielded, this one with replaceable rubbing block. The block was held on by hex nuts and there were holes in the suspension arm that allowed access to the nuts. This pattern suspension arm was used on almost all VVSS type 2 bogies. Some tanks were fielded with this layout but it is hard to see in photos so exactly how much service it saw is speculative.

Type 2C bogies were the late war pattern with revised skid shape. These are the most commonly used version on Shermans prior to 1944, especially on remanufactured M4s and M4A1s.

The type 2C-1 shown has several interesting features. The bracket casting has been revised and now the mold seam is on top of the bracket near the rounded upper edge. The detail around the gudgeon block retainer bolts is revised and now has three thickening bumps outboard of the bolt holes instead of the two used previously. Casting marks abound on the surface of the bracket, this being but one pattern observed. I also show a simple version of the block used to hold the gudgeon pins to the bottom of the bogie bracket. Unlike the normal part, this block does not taper at the sides to conform to the ribs on the bracket casting and may not be very common.

The type 2C-2 drawing shows the first attempt to raise the return roller on all Sherman tanks. This was done with a thicker pillow block as on the later type 1 bogie. Note that this bracket casting is similar to the one shown in 2A but it does have casting numbers on the face. I also show another type of lever with casting marks on it too. The 2C-2 layout was very common on tanks in 1943-44 and remained in use to the end of the war.

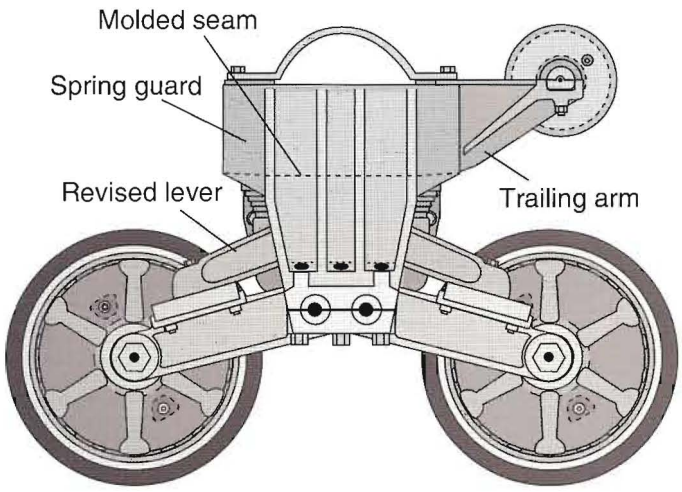
The type 2D bogies are the late VVSS version with roller trailing arm brackets that incorporate the raised roller feature. Note the bent shape of this roller mount when compared with the previous ones. Other casting mark variations seen on some bogie brackets, levers, and arms are shown in both the 2D trucks illustrated.

I have not shown it, but a variation of the 2C and 2D bogie was made in Canada for the Grizzly (M4A1) and Sexton. From the side they look identical to the ones shown here but are different in form when viewed from some other angles. The principle difference is the shape of the four vertical ribs on the bracket face. The Canadian bogies' ribs flare out at the top of the casting whereas the U.S. pattern bogies have vertical profiles. See page 345 in Hunnicutt's Sherman book for a nice picture of a Sexton with this bogie truck. It is possible to tell a Grizzly from a U.S. made M4A1 by this suspension component.

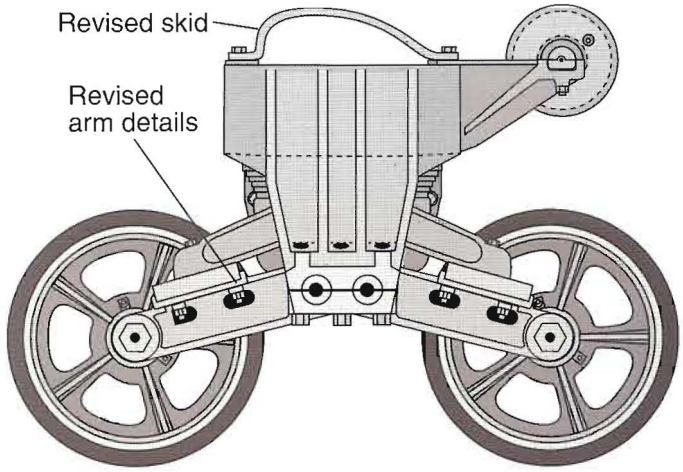
Until recently model builders have only had the aforementioned type 1 bogies (Tamiya M3 kits) and the type 2D (everything else). For reasons known only to the manufacturers, we were never offered any other type. That has changed.

The new DML M4A1 comes with both a newly molded set of type 2D bogie trucks (with another variation of casting marks) and with a set of type 2C-1 trucks. Alternate parts are also included for the type 2C-2 raised roller bogie. Way cool! These 2C bogies differ in construction in that they have separate parts for the spring and roller bracket which is, in my opinion, the way to go even if you still have to deal with a centerline seam on the spring. For the hard corps, you can also get a mid-production bogie (2C-1) truck from the old extinct Tamiya M10 and M36

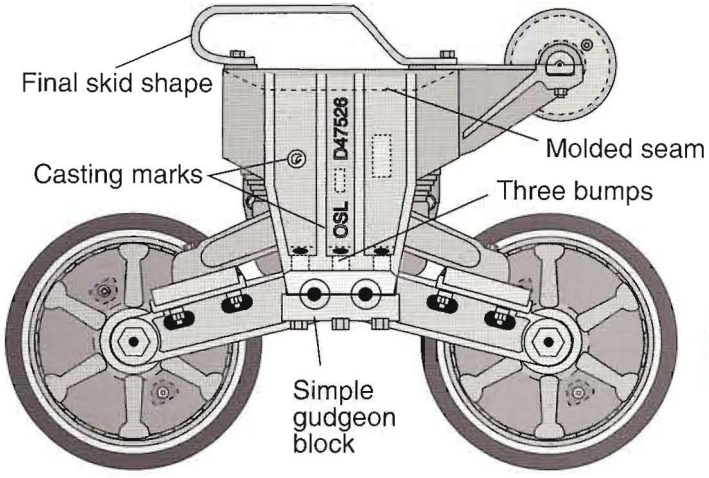
Type 2 Bogie Variation



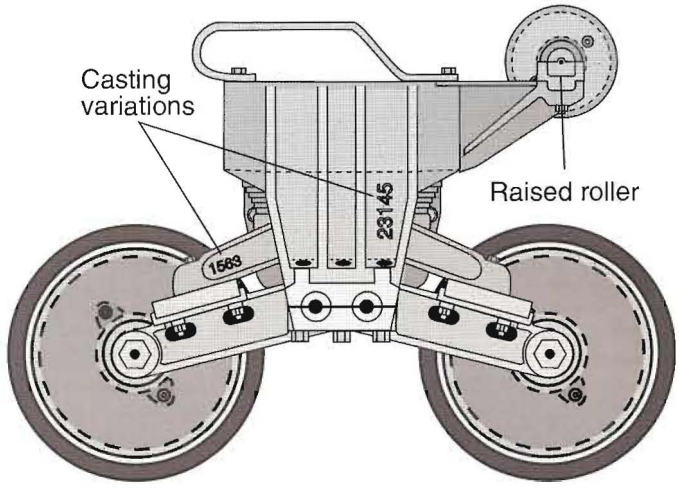
TYPE 2A: Symetrical skid.



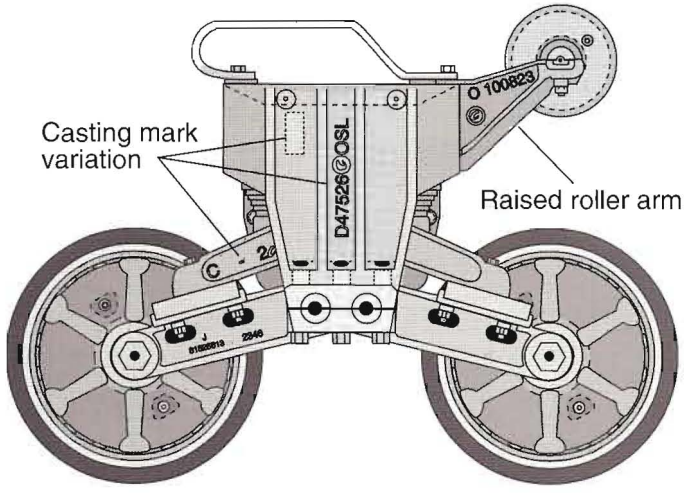
TYPE 2B: Production release skid.

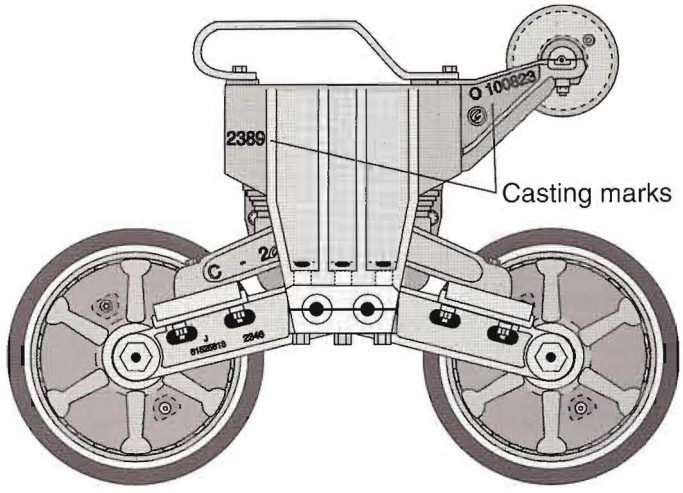


TYPE 2C-1: Intermediate standard.



TYPE 2C-2: Intermediate raised roller.





TYPE 2D: Late version.

FIGURE 6

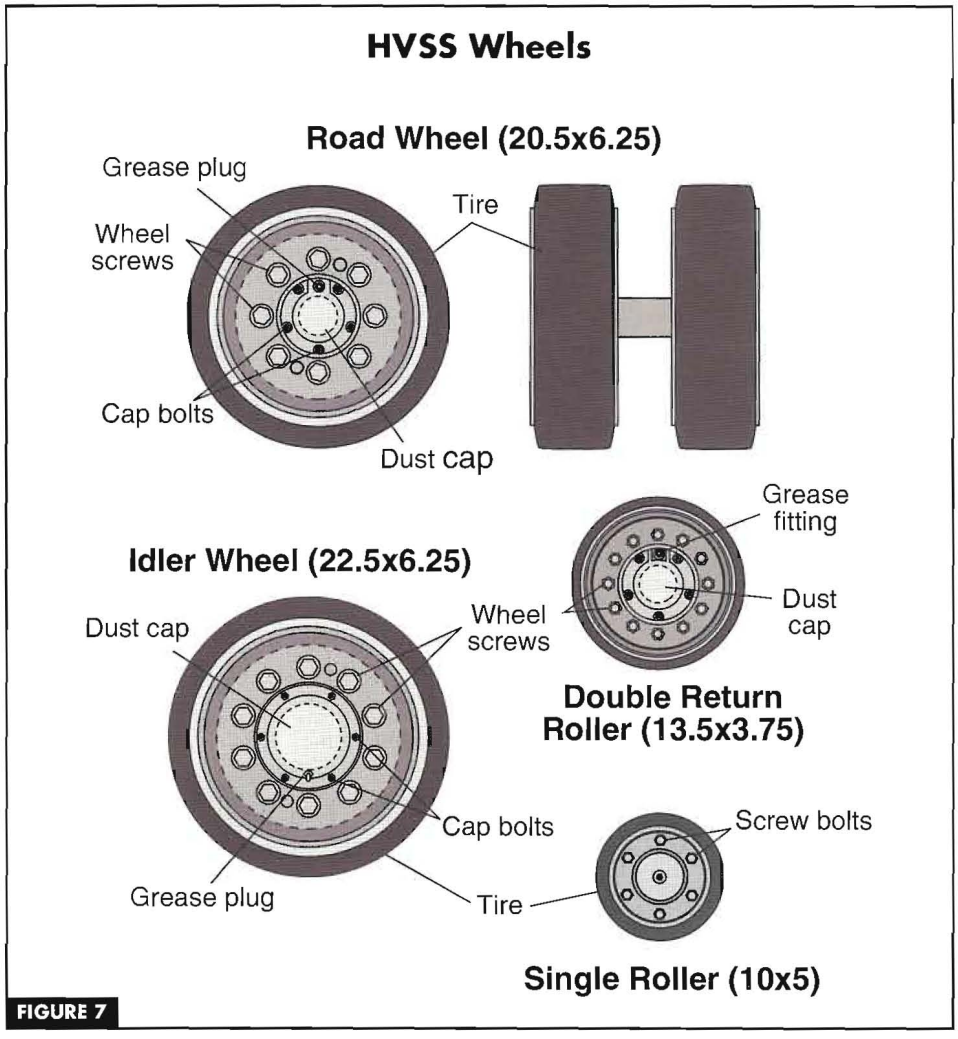


FIGURE 7

tank destroyer kits. These units do not have springs so you will have to work on them some to make them fit a more modern tank kit but it is an option, if you have one of the old TD's rotting in the closet.

HVSS Suspension

The type 3 bogie is for the late war HVSS suspension. This suspension system used paired wheel sets on a center pin track block and had separate return rollers bolted to the hull sides instead of on the bogie. Besides the benefit of lower ground pressure on the wide tracks, the HVSS gave a better ride. By Korea time, it was the only suspension found on most Sherman tank hulls. Tanks converted to HVSS include the M4A1 76mm (W), the M4 (composite hull) and M4E5 (105mm), all 47 degree hull forms of the M4A3, and some M4A4 tanks. Postwar conversions were also made so it is possible to see many types of M4 tank on this suspension.

HVSS Wheels

The four types of wheel used on the HVSS suspension are shown in **figure 7**. At the top is the road wheel in two views. This wheel also mounts a rubber tire. It measured 20.5 by 6.25 inches in dimension with the pair of wheels covering the width of the track block. The wheel is held onto the axle shaft with large hex head screws and there is a bearing cap in the center of each wheel that is held on with smaller screw-bolts. A single grease fitting is installed on the dust cap and grease is purged out the back side of the wheel. There are two small circular plugs in each wheel face whose purpose is unknown.

The HVSS idler wheel was a pair also and mounted on the common idler axle shaft. It is bigger than the road wheels at 22.5 by 6.25 inches but otherwise the details are similar to the road wheel. Unlike the all steel idler of the VVSS suspension the HVSS idler uses a rubber tire.

There were two types of return roller on HVSS tanks. Two large roller wheel pairs were mounted in the gaps between the bogie trucks and three single wheel rollers were mounted above the three suspension units. The larger roller was 13.5 by 3.75 inches in dimension and the smaller roller was only 10 by 5 inches. The larger roller has features similar to the HVSS road wheels but the small wheel roller has slightly different hub detail. Both types have rubber tires.

Not shown, but understood, is that the HVSS tires also have company and other stencil detail molded into the sidewalls of the rubber. Brands used include the ones mentioned above for the VVSS tires.

HVSS Bogies

The HVSS bogie truck looks quite a bit different from the VVSS unit but performs many of the same functions. Details are shown in **figure 8**.

Note the prominent data plate attached to the shock absorber tube. The shock absorber is attached to each suspension arm at a pivot pin and held in place with a pinch bolt. The suspension arms are removable by loosening the pinch bolts for the gudgeon pins.

The only prominent casting features on the HVSS suspension are found on the suspension arms. Some arms have casting numbers and other marks inside the dimple areas on one side of the arm casting only. Some arms have no numbers and also have a small rectangular nib sticking out at the top of the arm casting. On the left arm shown, this would be on the opposite side and not visible here. Some arms do not have this nib, and its purpose is unknown.

HVSS suspension parts are currently only available in plastic from DML. However, the now extinct company MP Models used to sell both an M50 and a conversion set using the HVSS parts. The DML ones come in the M4A3 kits (labeled WWII and Korean versions), in the POA flamethrower, and you can also get them from DML as a conversion set. These are well made for the most part but require some conversion skills to attach to most Sherman models. Only the POA kit can be considered an "out of the box" HVSS tank model since it is the only one with a hull made to accept the suspension without modification.

—Pete Harlem

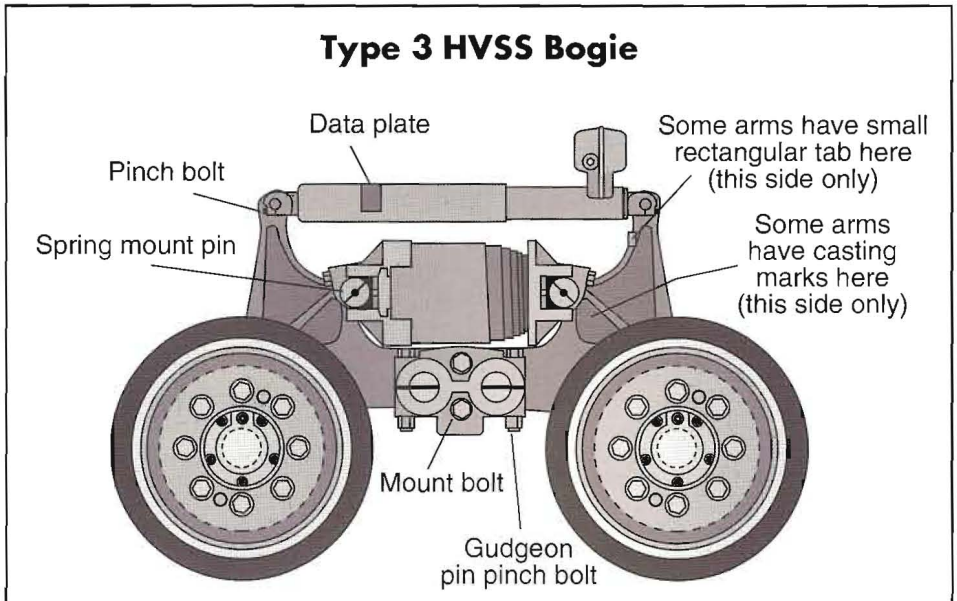
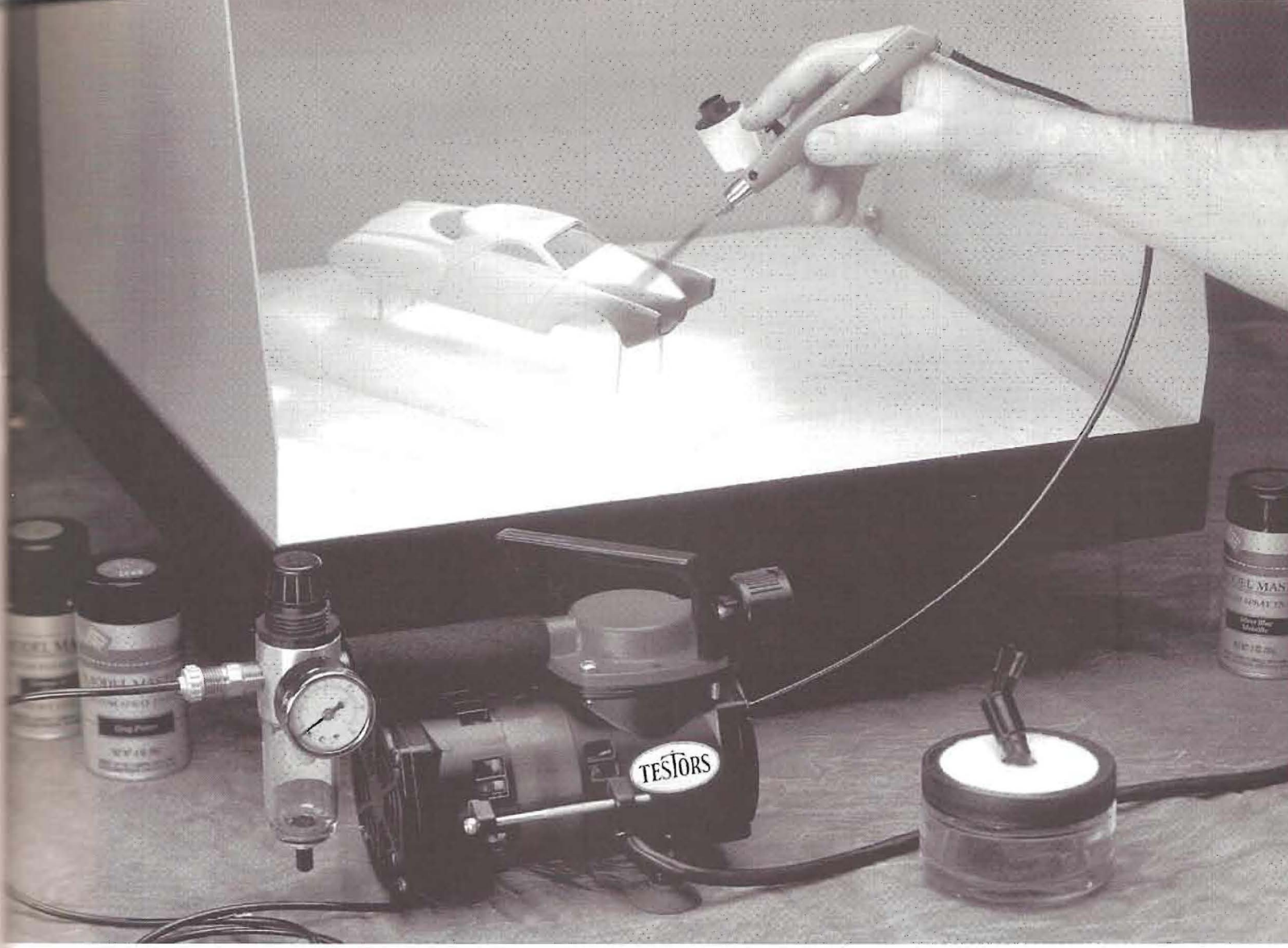

Type 3 HVSS Bogie
Data plate
Pinch bolt
Spring mount pin
Some arms have small rectangular tab here (this side only)
Some arms have casting marks here (this side only)
Mount bolt
Gudgeon pin pinch bolt

FIGURE 8



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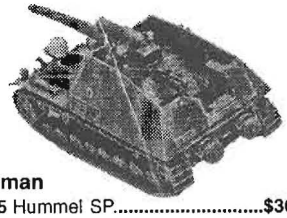

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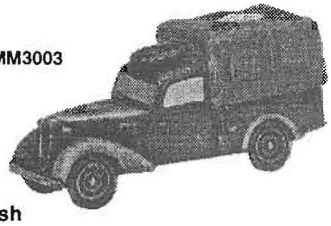

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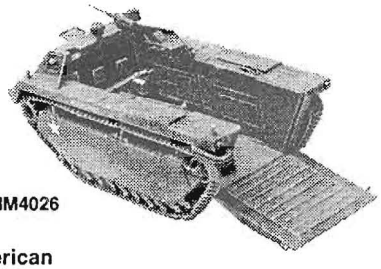

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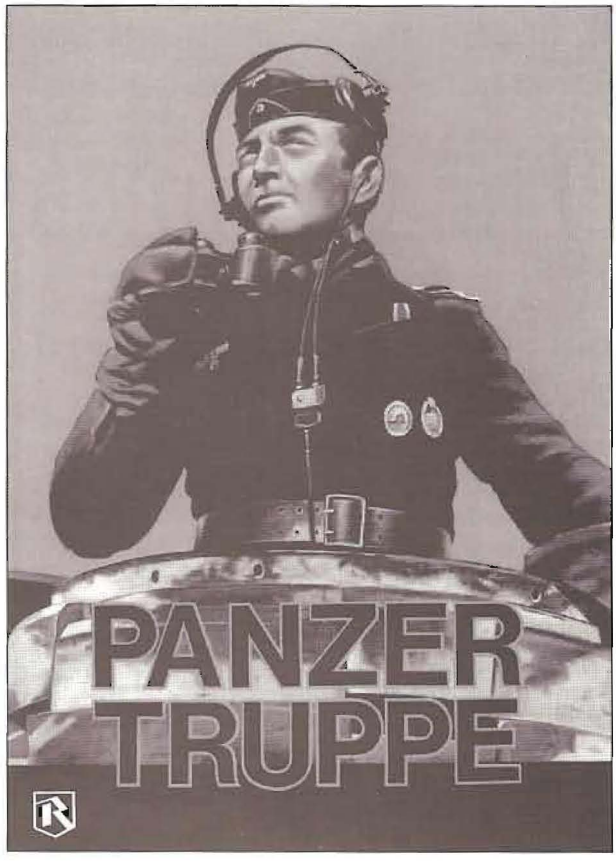

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Triple A On Double A

The Alan truck represents one of the most numerous trucks of WWII. ZIS trucks were made in Moscow until 1942 when the Germans drove the production to a plant in the Urals. The ZIS-5 was built from 1934 until 1955 and the Urals versions are thought to have flat topped fenders of simpler design. The kit ZIS has the early rounded fenders of the Moscow version and metal cab panels. ZIS trucks were also modified to carry searchlights, pontoon bridges, snowplows, water or gasoline tanks, compressors, and even converted to half-tracks, and as gun mounts.

The WWII Soviet army fielded the M-4/7.62mm quad mount of the Model 1910 Maxim machine gun as an anti-aircraft weapon. It featured a tall tripod carriage aimed by two gunner shoulder rests. The four water cooled guns were fed from clip on ammo boxes, the guns and mount could be broken down for transport, and it was also commonly bolted onto trucks, sleds, or wagons to make mobile AAA platforms. Wheeled versions commonly were on ZIS-6 AAA trucks but the quad was also mounted on smaller vehicles. Two twin axle trucks converted were the GAZ AA and ZIS AA 1 1/4 tonners. The advent of a 1/35th kit of the quad Maxim from the new Russian company Brigade Commander made this conversion possible. Either the Alan ZIS-5 truck kit or its newer clone from DML/Dragon can be used as a mount.

Just call me Alan

I chose the Alan truck and quickly found there is not much reference material available. I had to rely on the drawing of a GAZ AA that comes with the Maxim kit instructions. It contained some useful details. It showed the layout of the pump hand crank and water lines (which are not supplied), and the details of the bench seat mounted in the cargo area. Taking it on faith that the ZIS truck version was similarly rigged I jumped on both kits.

Alan's kit has detail on par with Italeri's truck kits even if the parts get a bit clunky once in a while. The molding is good except for the wheels and tires. There are a few mold blemishes or dimples needing attention, and most of those are not visible anyway. The parts fit well and represent the original details equally well. I thought the wood pattern molded on the cargo box boards was overdone at first glance but once I painted it I changed my mind. I resisted replacing them with wood.

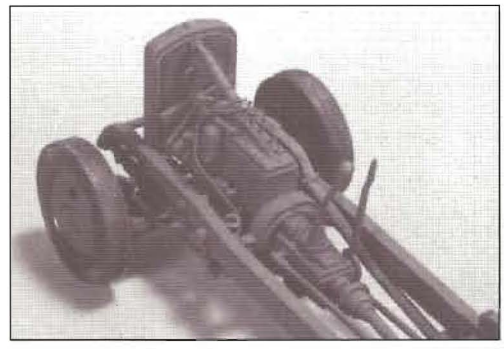
I started with the frame to get the suspension on straight. This caused no problems, so while that dried, I assembled the rear axle (a few dimples here). The springs, front axle king pin/hub assemblies, and steering arm and lever went on, but I left off part 84 until later when I could align it with the steering shaft. The box support rails, parts 91, had the clamp rod bolt detail removed and replaced with wire. It looked better.

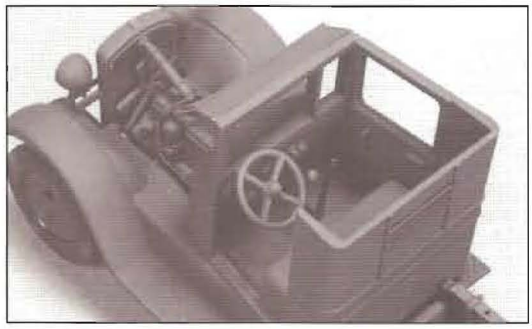
The engine and tranny are molded as halves and needed some more putty. Part 51, the accessory drive, was broken and the small end missing from the box. I substituted with spare bits and drilled wire holes in the distributor on the front of the part. The engine fan and fan belt are too thick and would have looked better had I made newbies. I drilled out the exhaust pipe before installing it.

The engine was wired and installed into the frame using the cab floor to make sure it ended up in the correct place. Once placed, the radiator was installed to which I added a lower radiator hose with solder. I finished detailing the frame but the spare tire rack parts caused problems because the tire cannot be installed after the rack is built. Fiddling solved it.

The cab floor has good detail including pedals for the clutch and brakes. The seat has no demarcation to show where the fabric portion stops above the support box, solved with paint. The basic instrument panel has raised features, and since I planned to close up the cab, I just painted everything and moved on. The steering wheel gave me fits because the rim ends up interfering with the driver's door. The door wouldn't close properly until I bent the shaft. I left the roof off so that I could install window glass after painting the exterior. The headlights have clear lenses which I also installed later. I made the engine cover panels a slide-on fit to the cab and radiator allowing me to pull it off to show the engine.

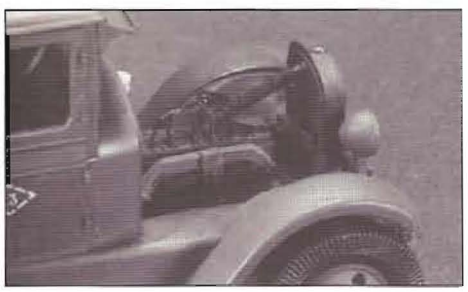
The vinyl kit tires are poor due to bad pin marks. They also have a ridge type mold seam and removing it will wipe out the tread. I put the pin marked side of the tires on the inside away from the viewer and on the inside on the rear pair. The wheel rims are not





Dem bones. The interior of the cab is basic and could benefit from some extra time, if you are so inclined. Upper right and below: the detailing here wasn't too bad. Rather reminiscent of older Italeri stuff.

A few views of the finished Maxim. Pretty when done, but not a pretty story to tell. The water feed lines make an interesting addition. Note my stowed ammo crates under the forward bench. Below: I left the cowling loose to show off the engine.



completely molded on the several Alan kits I examined including this one. Be forewarned that the outer edge of the rims can be uneven. I put the worst rims on the inside, out of sight, and I hid another by dropping the side leaf of the cargo box. The wheel assemblies are a tight fit on the brake drums and you would have to do a lot of adjustment in order to get them to roll.

I scratch built the bench seat in back with styrene rod for the vertical supports and U-channel for the seat frame. The boards are strip styrene scribed to give them a rough look, and the side rails are bent styrene. The cargo bed and box sides are kit stock. I left the right side drop leaf off so I could later attach it in the down position and the rear tailgate was glued on horizontal and supported with two triangle brackets made from strip. I ended up with a pinch fit between the cab and cargo box that had to be fiddled a bit to get the bed on the frame. I then added a gizmo'd water pump for the gun to the drop leaf.

Maxim to the Max

The Brigade Commander Maxim kit was built out of the box. As is, it makes into the quad mount on a tripod stand with integral water coolant tank using white metal castings except for the resin water tank. Instructions are basic, some details are poorly shown and that significantly increases the building difficulty. The resin water tank had a few bubbles but the white metal parts are very nice and impressive in their unbuilt state. Cleanup was required on most parts and metal parts mean spending quality time with your superglue.

I built the tripod as shown in the instructions and installed the mast. This comes at full height which made the model top heavy. It was a constant problem as I finished construction. I was always in fear of dropping the hefty castings. The poor ZIS was in danger of being smashed too, but somehow I got the mount together with only one instance of part reglue-itis. The carriage is an asymmetrical part to which you attach assorted frame bits, ammo box and feed system. I warn that the feed chutes (curved thingies) that come off the rear of each box must fit between the guns when the mount is tilted up. If they are not correctly aligned the guns can only be installed horizontally.

Other than that, the gun carriage is a tricky bastard that gave me fits and cryano fingers. I almost threw it into the wall 15 times it was so frustrating. No provision is given for the ammo belts so the purist should add these if you plan to put the mount into a diorama showing it firing. The instructions do not show where the right hand support rail goes and I tried to put it on the outside of the right hand ammo box. This was wrong since it goes between the last two boxes on the right side!

Somehow I got the gun carriage ready for the Maxims. Small attachment points for each do not provide a lot of surface for the glue to bite onto and the gun weight makes for more frustration while aligning them. This alignment controls the tubing for the water system and the trigger bar, so be careful! The thing came out reasonably straight but I felt I had nothing to do with it. Honest. I tried to screw it up many times. I was not happy with the sight system since it neither fits on the gun mount with ease, nor is it well molded. I strongly suggest you go find a big ring and bead sight from the radio control boys or something. I wished for a replacement in photo-etch.

The final touch was the addition of the water hoses. These run from the tank to the gun mount and then to the hand pump on the side of the drop leaf. Mine are insulated electrical wire and this gave me the smooth curves I wanted. One hose runs up from the water tank to the gun manifold and a second hose runs from the outlet manifold to the pump. A third hose runs from the pump back to the water tank.

The gun mount was installed on the back of the truck and I then painted everything olive-green. I followed that with kit decals modified a bit to get the display shown. I drybrushed the truck next and did some black wash on the dirty side. The guns were painted with gun metal and then buffed a bit. I finished by putting ammo crates under the bench seat, installing the window glass, headlight lenses, and finally the cab roof.

ZIS was fun... really

To summarize, the Alan ZIS-5 is a good model with only a few problems. It is generally accurate and comparable to other 1/35th truck kits. The tires and wheels are substandard, but the resulting ZIS model is worthy of most collections. The problems encountered can all be surmounted and the conversion possibilities are many. It is recommended, especially to those who enjoy military trucks.

The Brigade Commander quad Maxim gun mount is another story. First impressions are high, the complexity and detail of the original is dead on, but the assembly of it is frustrating. The parts are well molded, look great built, and attract attention, but it is not easy to build nor recommended to beginners. But if you like Soviet gun mounts, and have some patience, then by all means buy the kit. Spend the next winter putting the little jewel together and then go call Hair Club for Men because you are going to need a transplant. The ZIS was fun, the gun was none. The results speak for themselves.

—Pete Harlem

MMiR RECCE

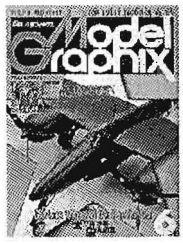
Alan ZIS-5 3-ton Russian Truck. Stock number 003. Kit graciously provided by Squadron Signal Mail Order. Suggested retail $24.98.

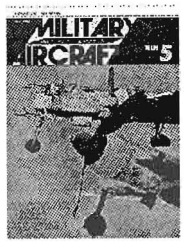
Brigade Commander Maxim Model 1910 Machine Gun. No specific item number. Kit graciously provided by the U.S. distributor, R&D Militaria, 460 Lakeview Drive, 111B #4, Ft. Lauderdale, FL 33326. Suggested retail price $24.95.

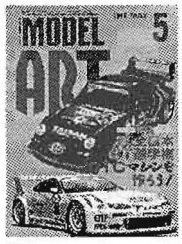
References

Russisches Mashinengewehr 'Maxim', Modell 1910. Waffen-Revue, #63, pp.39-47. A tough one to find admittedly, this article has several nice photos of the quad Maxim mount and a few line drawings of the main parts that appear to be derived from an operator's manual. German text.

World War Two Military Vehicles Transport & Halftracks by G.N. Georgano, 1994. Osprey Automotive Books, London. This 208-page book includes a brief history of the ZIS trucks and shows several versions of the ZIS-5.







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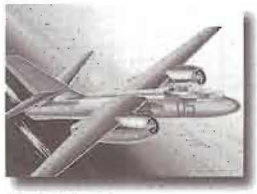

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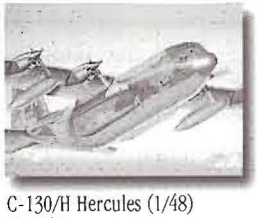

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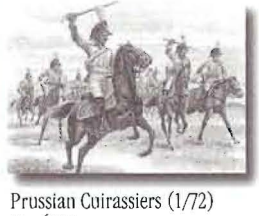

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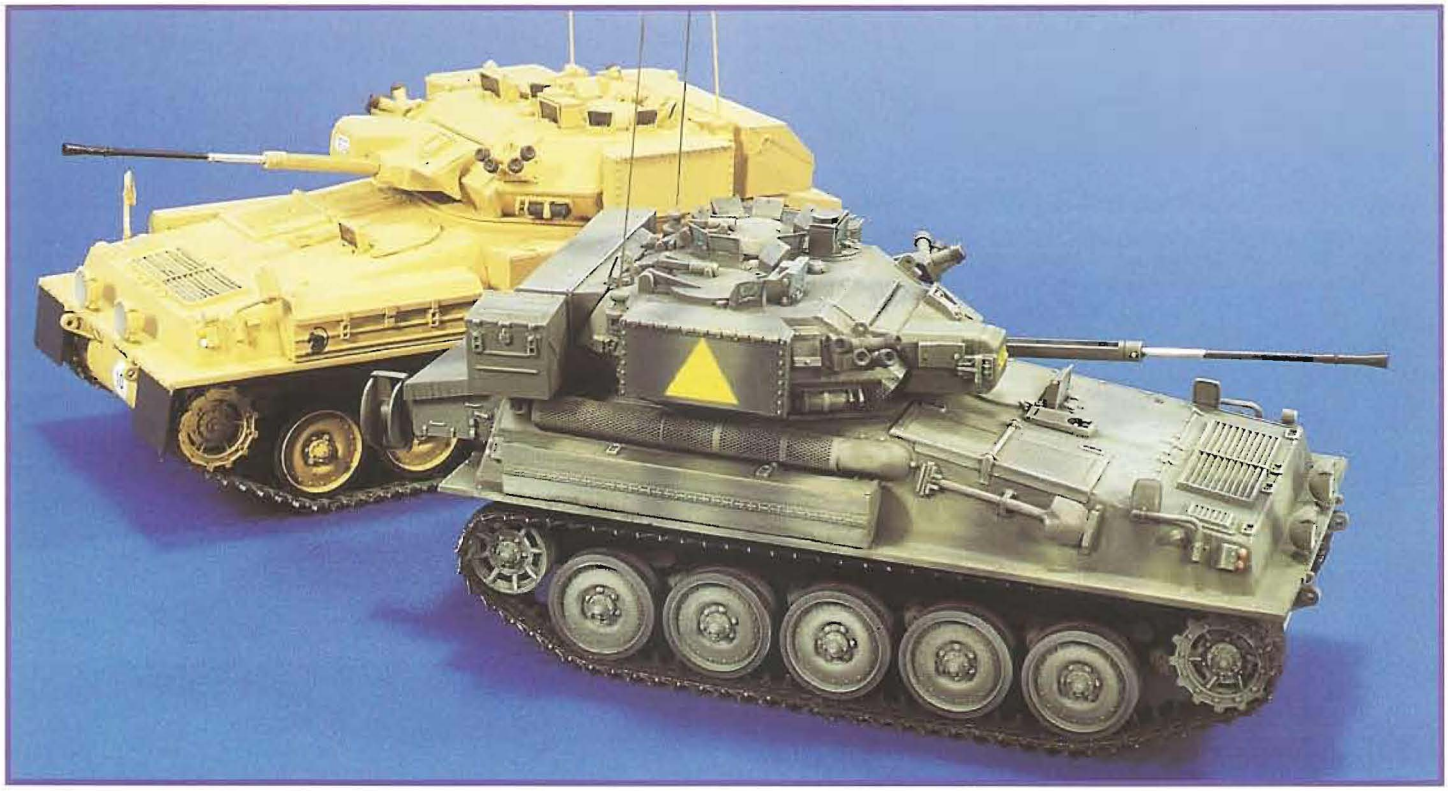


Scimitar. I give high marks to any vehicle named after a big pointy sword. The idea for the little fella was first pitched in the early sixties, but the finished concept was not completed until the early seventies. The Scimitar is not just one vehicle, but rather one member of a veritable clan of armored vehicles used by our good British friends and even a few other NATO members.

The father of this family is actually the Scorpion CVR (T). The acronym stands for "Combat Vehicle Reconnaissance (Tracked)." Interestingly, there was a wheeled (W) prototype called the Fox. It mounted the same turret and gun as the Scimitar, but it was never accepted for service.

The Scorpion mounted a 76mm L23 gun as opposed to the Scimitar's 30mm gun, and it was envisioned as a fire support vehicle. All seven members of the clan share the same basic chassis and each has a different role to play on the modern battlefield. Let's meet them, shall we?

Striker is the anti-tank version, mounting the nasty Swingfire ATGW launcher; Spartan is the APC version (hopefully not indicating the accommodations); Samaritan is an armored ambulance; Sultan is the command post variant; and Samson is the recovery vehicle. The Scimitar role is recon and it fulfills it well. The Jaguar engine will scoot it along at 50 mph to get out of trouble in a big hurry! All the kids share an extremely low ground pressure of just 5 psi, meaning they can get in and out of some pretty gooey places.

All of these vehicles have seen and see extensive service with the British and the Belgian armies. Of course the British are the big users and the first vehicles were delivered in 1971 with the first large scale combat action being the Falklands in 1982. All saw service in the Gulf War and many of the types are currently deployed in Bosnia.

A Scimitar by any other name...

Why is this a review of the Scimitar and not the Scorpion? Good question. Both kits were announced more or less simultaneously, the Scimitar by AFV Club and the Scorpion by Revell of Germany. Both were subsequently and simultaneously released, but for some reason the Scorpion is not currently available in the U.S. This may change with time and I'm sure any enterprising modeler could snag one from a shop or mail order outlet in Europe.

It's real obvious that this kit has a dual purpose. There are Scorpion parts everywhere and many of these get discarded with this version. We are taunted with little illustrations of the other vehicles in the family throughout the instructions, but there appears to be no plan to release any of them as of yet. And, unfortunately, you can only build the one kit out of the box. So, lets talk about that.

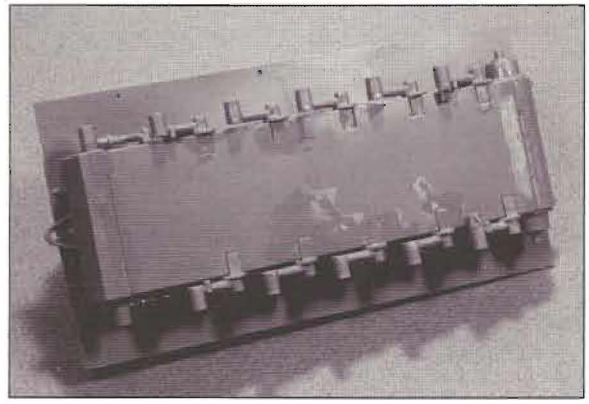
Construction

Starting at the bottom, the torsion arms have rather odd location holes. They are square and correspond to square mounts on the backs of the arms. This is not a good way to make sure all the arms are straight. If you sight them down their length and use a slow drying glue, you shouldn't have a problem.

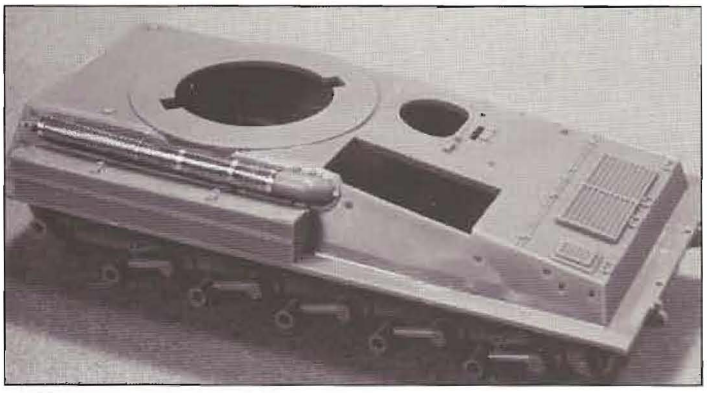
You get a choice of early or late drive sprockets, but check your references carefully. Many of the little details on both the Scorpion and the Scimitar were not necessarily unique to either. The vehicle was in service for over twelve years, so there's a lot of crossover in the parts department.

Both sprockets are really delicate and difficult to remove from the sprue without damage. Shades of the M88 light guards.

The roadwheel hubs are separate and are weeny little things. Those of you with large finger syndrome may have a tough time with them. Be careful how much cement you use on these. The contact point between them and the wheels is not large and glue can puddle in this area, distorting the part.



The underside of the hull revealing those weird square locators. Nice glue stains!

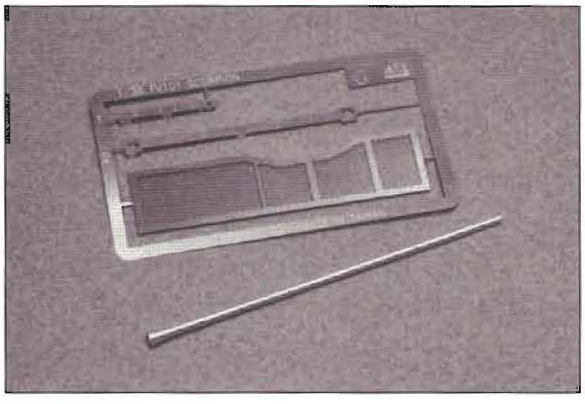


The top of the lower hull during construction. The shot at left shows the large opening for the engine. Any engine scratch-builders out there? At right is the hull just prior to adding the roadwheels, with both the muffler and the wire reel in place. Below left: the etched sheet as it comes in the kit and the turned barrel. Below right: the major components of the running gear; sprocket, idler, hubs and roadwheels.

The tracks are bad news. The fit is very tight and their very delicate connection point broke almost immediately. On both sides. Bummage.

I threaded the tracks together with superfine brass wire. I clipped off the ends as tightly to the link as I could to disguise it. A little superglue helps, too (praying wouldn't hurt either). The joint should eventually be arranged in the least conspicuous place.

As you move to the top of the model, the instructions have you add large stowage boxes to the front hull area. I didn't always see them used in photos (it seems to be more of a later feature) so I left them off my model.



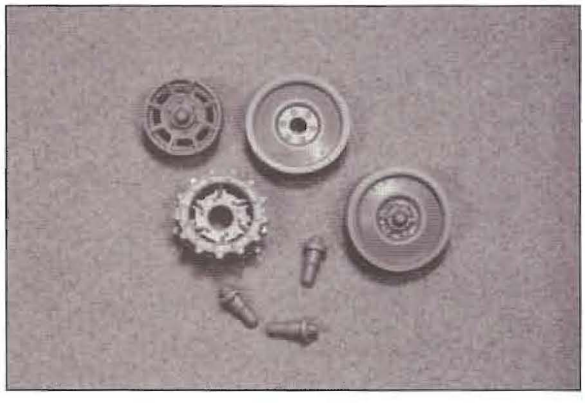
Both the Scorpion and the Scimitar were so small inside that they are literally festooned with exterior stowage boxes of various sizes. Even without the two forward boxes, there are still three more for the lower hull.

Like other AFV Club kits, this one includes a lovely sheet of photo-etched brass. The first piece to use is the large muffler screen. It gets bent to conform to the exhaust pipe and this can be dicey. The material is fairly forgiving, so you'll have a few chances. Test fitting helps here. The part does have a top and a bottom. The top has a curved section in it (to compensate for the turret race).

The front driver's mirrors are molded in the folded position. You must cut them to show them in their extended position. I figured mine would get constantly broken off as I worked on the model, so I left them as is.

The instructions indicate the use of the top mount headlights (F27). This is common on Bosnia deployed Scimitars, but the smaller under mounted lights were seen on earlier Scimitars, too. I mention this because they're in the box!

The next etched piece is for a wire reel rack on the back of the vehicle's rear stowage box. You add the wire. This is described as an optional item, but it seems quite common.



A busy little turret

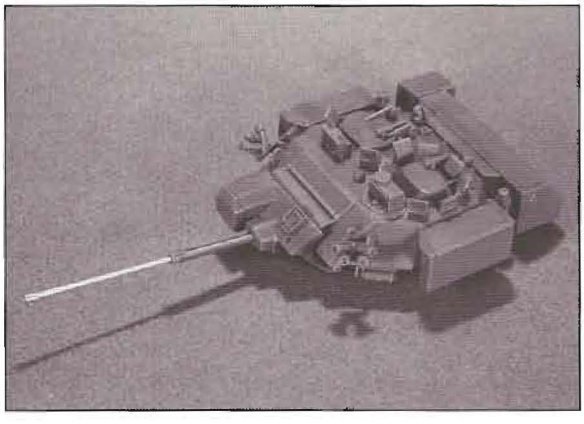
Boy is there a ton of stuff to add to the turret! There's eight periscopes, two vision devices, four stowage boxes and a big bunch of other bits. Cool.

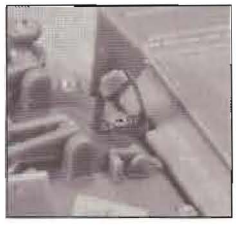
No real problems here. This certainly was the most fun area of the model to work on. Watching it become more and more complex was a blast. AFV Club provides us with another treat here in the form of a turned aluminum gun barrel. Beautiful. Gorgeous. My favorite part is that the gun's sleeve is molded in styrene, and when the gun is installed the barrel is still distinctly visible through the top. Most vehicles in the field have a canvas cover installed over this, but I left mine bare to show off.

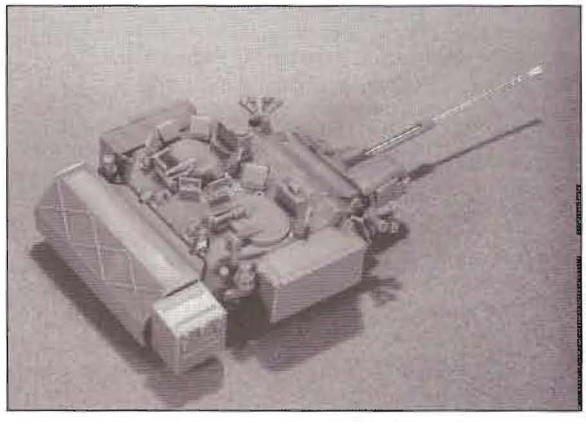
The final photo-etched piece gets deployed to the back of the gunner's hatch to form the hatch rest. A highly teeny, as well as weeny, part gets installed on top as the bumper.

I had one small fit problem on the turret. A lift ring on the right side (C16) doesn't get along with the stowage box in that same vicinity. The ring lost on my model, getting trimmed in the bargain. It's nearly impossible to see when all the parts are installed.

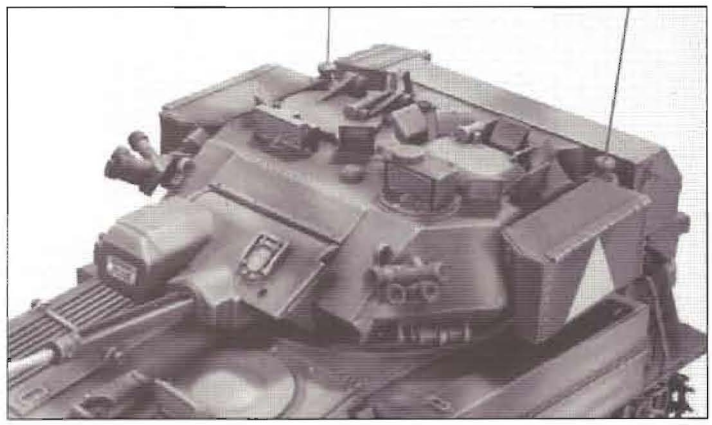
I left the mud flaps off, but this was rarely done on the real vehicle. It was common to see the front set missing and they seemed to get chewed up pretty fast, too. Beware the reflectors. The instructions show







Above: left and right views of the finished turret. There's lots to stick on! Note how the turned barrel mounts into its sleeve. Just like a real Scimitar. The small photo shows the etched hatch rest and its micro-sized bumper.



This page: overall finished views of the vehicle. The turret detail really turns out well. I added antennae from fine brass wire. The ends can be a bit sharp. Works well on people who like to grab your model without your permission... The Scimitar is just exterior stowage galore! The shot at right shows off the rear marking and convoy lights. At far right is the highly detailed engine deck. This thing would look great with a crew in it. I believe that both Warriors and Accurate Armor offer one.

their installation incorrectly. The line drawings in the painting section show the correct positioning.

Painting and finishing the curved sword

I opted for a NATO vehicle. I was inspired by color plates in the Osprey Vanguard on the Scorpion which depict a dusty faded scheme of green with darker bands. This scheme also offered two big yellow tactical triangles for the turret which I thought set off the color scheme well.

I used Polly Scale paints which I mixed to match the illustrations in the book. I used Polly Scale Dust to fade to the scheme and the decals slightly.

The periscopes and vision devices were all painted medium blue, then given a drop or two of Micro Scale Krystal Klear. This was also applied to the various marker lights at the corners of the hull. These add interesting touches of color to the vehicle as well.

The tracks were sprayed with several thorough coats of flat black (they take a wash better this way). Like most modern AFV tracks the center blocks are rubber, so I left them black but did drybrush the outside edges with gunmetal.

A wash and drybrush (there's lots to drybrush) finished it off.

The second vehicle in our lead in shot (built by Steve Roth) was painted with the new Model Master British Gulf War Armor Light Stone. Steve reports that he was quite satisfied with the paint and found it to be more accurate than others he's used.

There are a huge variety of schemes to choose from for this vehicle. Along with those mentioned in the instructions, I've spied an interesting dark yellow and green scheme for Scorpions and Scimitars used in by the Brits in Greece and Turkey; the UN overall white schemes; and a super cool gray and white scheme used by British NATO forces in Norway. So you've got a lot to pick from.

Overall, this was a pretty good kit. It fills a long empty niche in the modern armor line-up. There were only very minor fit problems. The worst of it was the tracks, which was too bad considering all of the good points of the kit. Much of my frustration was offset by the presence of the photo-etched sheet and the wonderful turned barrel.

I can't think of many other kits that can provide this many options for finishing. Modern fans are going to want more than one (we did).

—Pat Stansell

MMiR RECCE

AFV Club British CVR (T) FV107 Scimitar. Kit number AF35013. Kit graciously provided by Marco Polo Imports. Suggest retail $29.98.

References

Scorpion Reconnaissance Vehicle 1972-1984, by Chris Foss & Simon Dunstan, Osprey New Vanguard 13, 1995. Really the best all-around look at the subject. Good history, plenty of photos and Peter Sarson's great color plates. All for less than twelve bucks. You can't beat that.

Airborne Elite (2) NATO's Northern Flank, by Yves Debay & James Hill, Concord Publications, 1995. Great color photography of Scorpions and Scimitars deployed in the field.

The Guards, Britain's Household Division, by Simon Dunston, Europa Militaria No. 20, Windrow & Green, 1995. Reviewed elsewhere in this magazine. Good large color photos of the Household Cavalry's Scimitars in the field. Only a few shots though.

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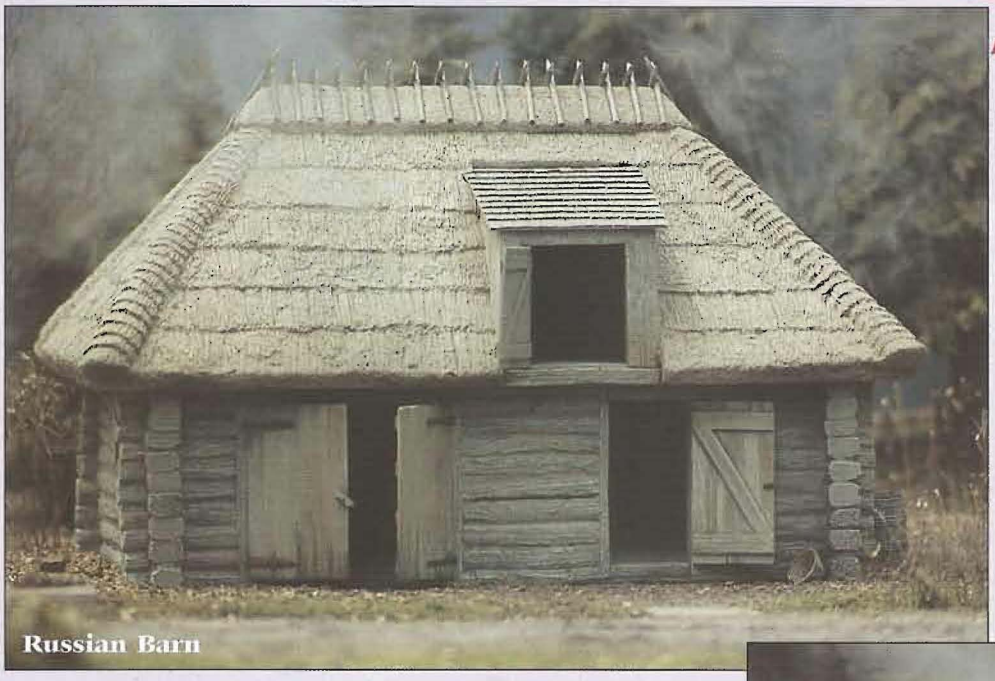
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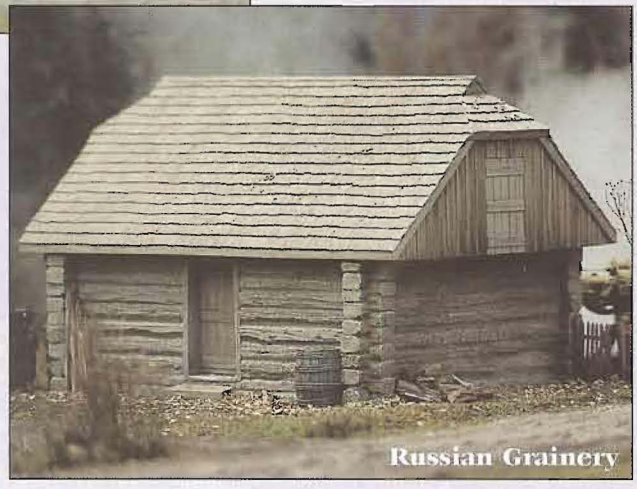
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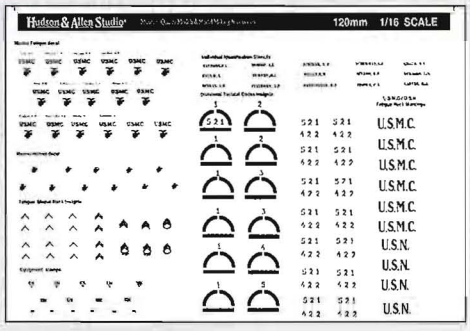

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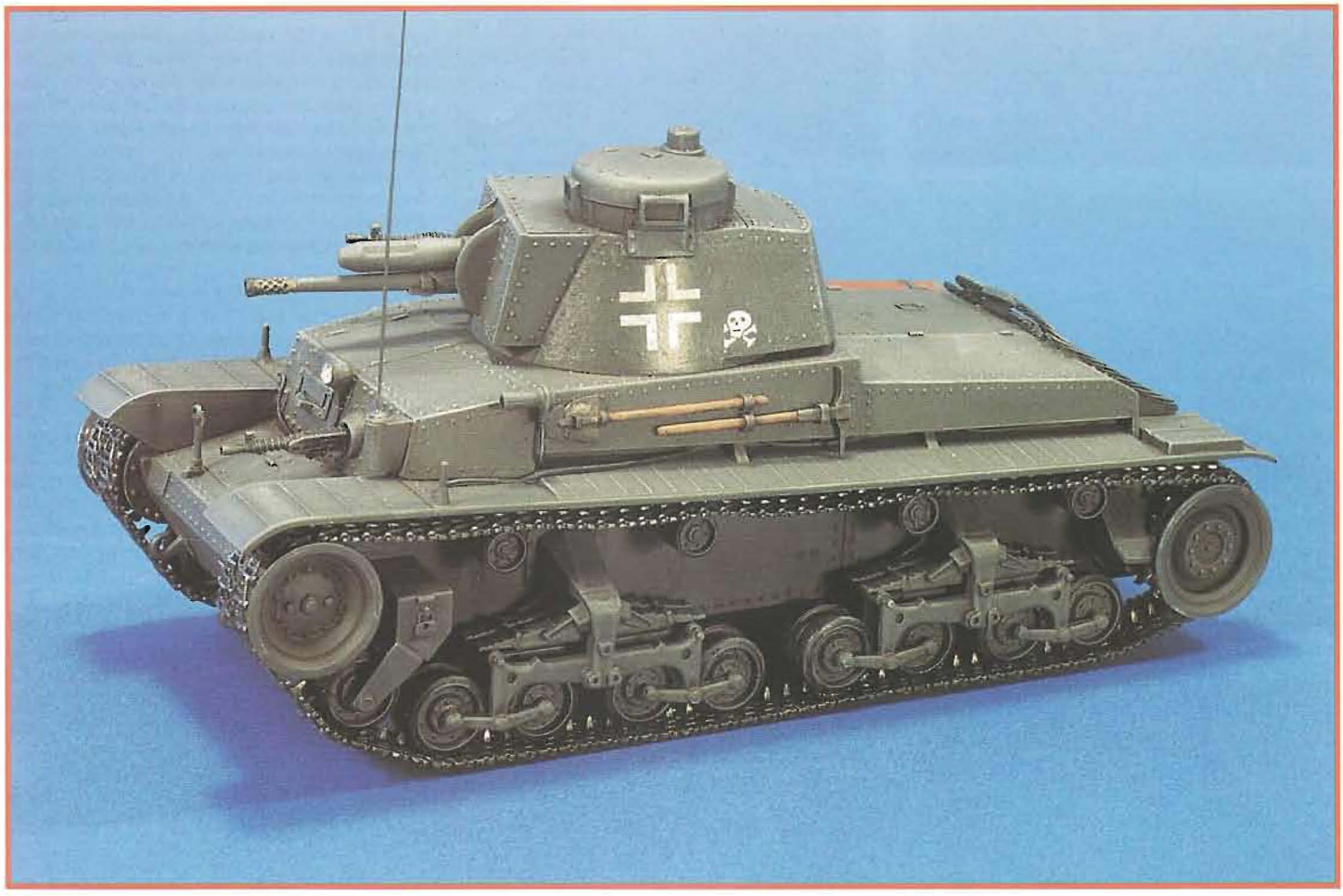
35 To A Tee

Whadda Know? Finally a 35t in plastic



Did you hear that? Listen closely. There. That was the sound of one of the last pieces of the German armor puzzle falling onto place. This particular piece is the German/Czech 35t tank.

I've been extremely curious why one of the other major manufacturers hasn't jumped on this. I mean, it's so damned obvious. It was used in all the early campaigns; Poland, France and even Russia. The design (like the "t" says) is Czech in origin. Official German designation was Panzerkampfwagen 35(t). The t was for "tschechisch," German for Czech. The 35t was one of many advanced designs to come out of the Skoda Works in the Czech Republic in the thirties. The 35t, along with the 38t, became part of the German arsenal just about one or two minutes after the annexation of the Czech state by the Germans. Lucky for them all these cool tanks were lying around. Some have said the Germans couldn't have started the war without them.

Certain divisions were made up almost entirely of Czech equipment. The 6th Panzer Division was the only army panzer division to be equipped with the 35t type. The 6th fought all through the early part of the war with it and even managed to still have a few in service by the winter of 1941/42. According to Helmut Ritgen's account of the 6th, the last of them were lost to mechanical failure at that time.

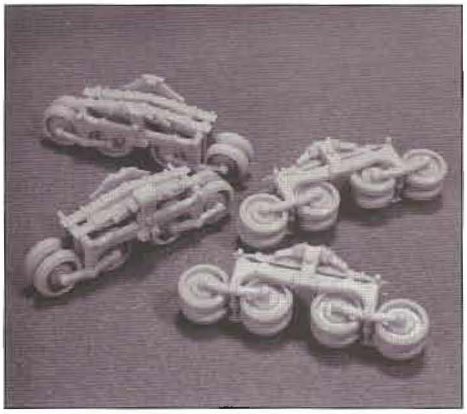
One other division was briefly equipped with the "t." The fledgling heavy tank company of the SS division Totenkopf used them in both Poland and France (ironically, Totenkopf surrendered in Czechoslovakia in 1945).

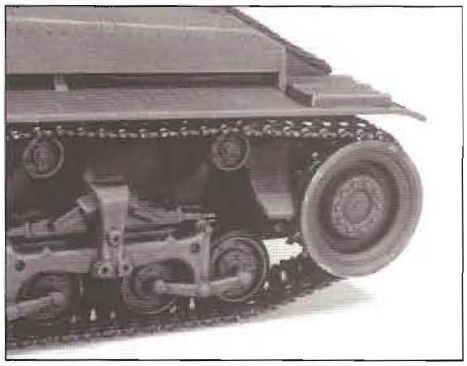
And the Germans weren't the only ones... The Slovak Fast Corps was formed by the Fascist puppet state that was developed after the annexation. They used the 35t (sometimes known as its original designation: R-2) as well as the 38t. Both were often seen decked out in their pre-war three-color camo schemes.

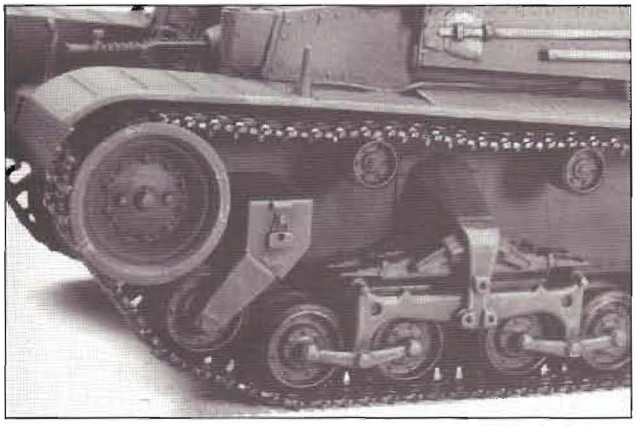
The unlucky Rumanians made use of the R-2 until they were decimated at Stalingrad. They later used a version modified by the installation of the Russian 76mm gun. Sort of a "Marder" version, if you will.

The 35t was fairly advanced for its day. It employed a highly unique suspension system and a relatively substantial gun. Its biggest drawback besides its somewhat thin armor, was the way the armor plate was assembled. The various plates were riveted, rather that wielded—a not so nice trait leftover from tanks of the first world war. What was not so nice was the tendency of the individual rivets to be sheared off by incoming rounds. Even if the round didn't penetrate, the rivet would fly around the inside of the tank, until something, or someone, stopped it. This would definitely ruin your whole day.

The unique front and rear sprockets.







Above left: the suspension units. Not terribly difficult, but it was hard to keep everything lined up. Above right: the rear sprocket. The multi-piece assembly provided in the kit captures the look of the real thing well. Left: the front end showing the forward trailing idler. Below left, right and bottom left: the turret and the front end. I was quite pleased with the final result. What's next?

Czech this out

The long awaited styrene version of the 35t is brought to you by CMK, which is, coincidentally (or is it?), a Czech company. The CMK kits are now imported by our friends at Eduard. I like this. No photo-etched is included in the kit, but just as we were going to press (and of course after the model was done) an extensive brass set for the kit was announced by Eduard.

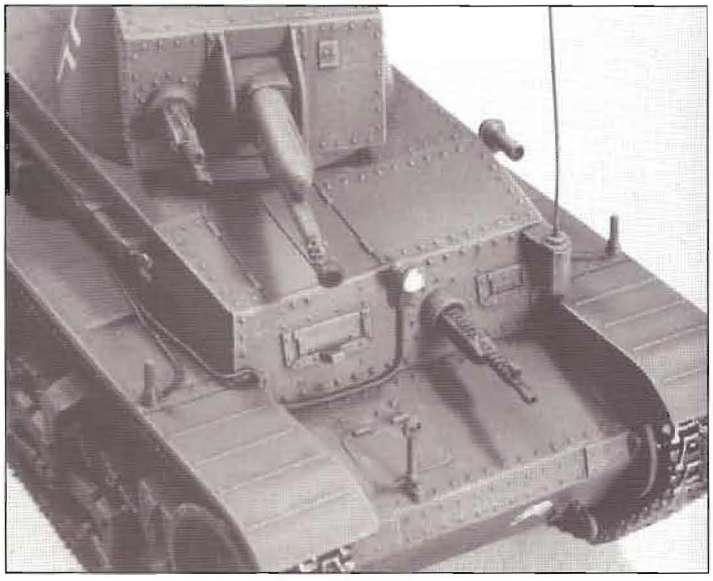
If you decide to build this kit, you're in for a surprise. It's not bad. I get a funny feeling whenever I crack open a kit from the former East block, but I was relieved to see and build this very decent kit.

There are four sprues in the box and a comprehensive instruction sheet. I always like it when the sprue layouts are shown.

Like many kits from the "Ostfront" the hull is broken down into flat plates. I'd suggest getting this all lined up and glued, then letting it sit at least overnight. Alignment problems here would mean trouble later on.

Some of the part attachment points are on the heavy side. You will need to exercise extra care when removing the smaller and more delicate parts. This is especially true of the sprockets. The teeth are really fragile.

The suspension is somewhat complex and the parts don't fit as tightly as other manufacturer's parts might. As a result you'll have to keep an eye on everything as it dries. Watch out for the various roadwheels. Two are for the forward idler, but they're not very well marked. They are all very similar, but if you use some of the bottom ones, they don't fit as well.



Left: the back deck. I added the tow cable. The Totenkopf insignia is unusual in that it appears in several places on the tank. I guess they wanted there to be no mistaking who they were...

The tracks are of the strip and link type. These can be easier to deal with than straight link-to-link. Photos of the 35t all show deep loops and sags in the tracks and this is harder to do with the strips than with vinyl or 1 to 1. By gently bending, I did manage to work some downward slopes into the top runs.

Construction of the remainder of the kit is remarkably unremarkable. I thought the center bulkhead which supports the upper hull might be too tall. I trimmed it, but it didn't cause any problems.

A few of the smaller parts could benefit from extra detail. The co-axial and hull Besa machine guns for example. The real gun had a sheet metal cooling jacket and the kit's are not very finely rendered. Ditto on the tools, which could use clasps and tie downs. The hull ring sight probably should be replaced with wire, too.

There are two pole-like devices on each fender. I have no idea what these are, but my references show them with a spring at their base and a wire leading back in to the hull from each. I didn't rebuild the part, but I did add the wire from fine solder. I also added wire and an MV lens to the headlight in the center of the front hull.

This is really nit-picky, but the front and rear tow hooks should have a distinct outside curl in them. The Italeri 38t ones are right, if you feel inclined to fix them.

Another detail you could add (but I didn't), is the front sand flaps. Each front fender had a fabric or rubber piece surrounding the front edge. This could easily be formed from lead foil or paper. I notice this mostly on earlier tanks.

Paint and stuff

Decals are provided in the kit for three different vehicles, including a scheme from the Slovak Fast Corps. These vehicles were very colorful as tanks go, with a distinct three-tone scheme reminiscent of later German designs.

I opted for the Totenkopf scheme because I liked the big skull and crossbones insignia (scary!). I wanted to render an early war scheme of the dark Panzer Gray to contrast the markings. I mixed my own color to get it nice and dark.

The decals went on with no problems. I noticed that some early war vehicles had a distinct sheen to them. When I flat-coated, I didn't let the whole vehicle go dead flat. This is especially evident on the turret. A little different than the norm.

Go buy this kit. Modelers with a little experience should have no problems dealing with its small foibles. It's cheap too, coming in at just under sixteen dollars in the U.S. The aforementioned brass set is in the wings and how long could it be before someone releases workable link-to-link tracks? Cheap and good? Somebody pinch me!

—Ken Dugan

MMiR RECCE

CMK PzKpw 35(t) Skoda Lt V2 38. Kit number T35006. Kit graciously provided by Eduard Model Accessories. Suggested retail price $15.99.

References

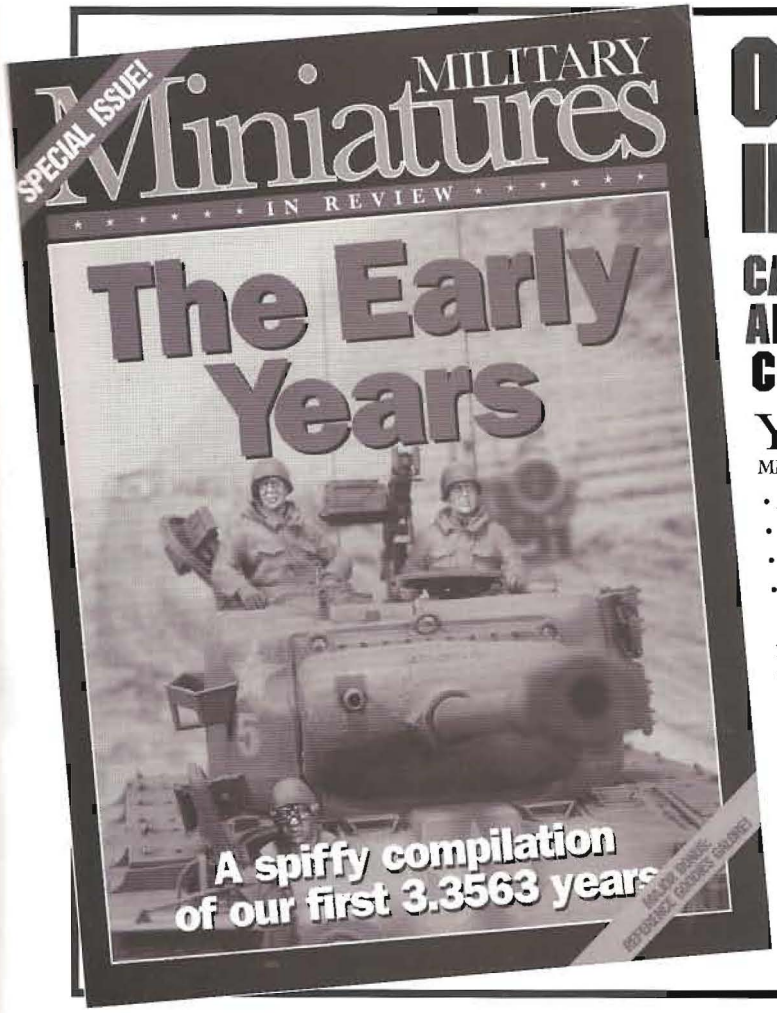
The 6th Panzer Division, by Helmut Ritgen, Osprey Vanguard Number 28. Osprey Publications, 1982. Herr Ritgen's lively account of his days with the division. Some nice (albeit small) photos of the 35t.

WWII German Light Tanks, Groundpower Number 001, June 1994. Delta Publishing. Excellent coverage of the Panzer I, III, 38t and the 35t. Japanese text.

The Eastern Front, by Steven J. Zaloga and James Grandsen, Squadron/Signal Publications, 1983. One of the few books that mentions the use of the 35t by countries other than Germany. Good color plates of both a Slovak and a Rumanian tank.

Panzerkampfwagen Skoda 35(t), by Horst Scheibert, Schiffer Publishing, Ltd. In the "in action" format. A good bargain priced book.

35(t), 38(t) und sein Abarten, by Walter J. Spielberger, Motorbuch Verlag, 1993. Oh come on—you know. The be all and end all of reference for wartime Czech tanks. Scale plans, photos, you know the drill. Also covers the Skoda heavy tractors used by the SS. Expensive. Think in the $60 range. Look for it at better stocked military booksellers. German text.



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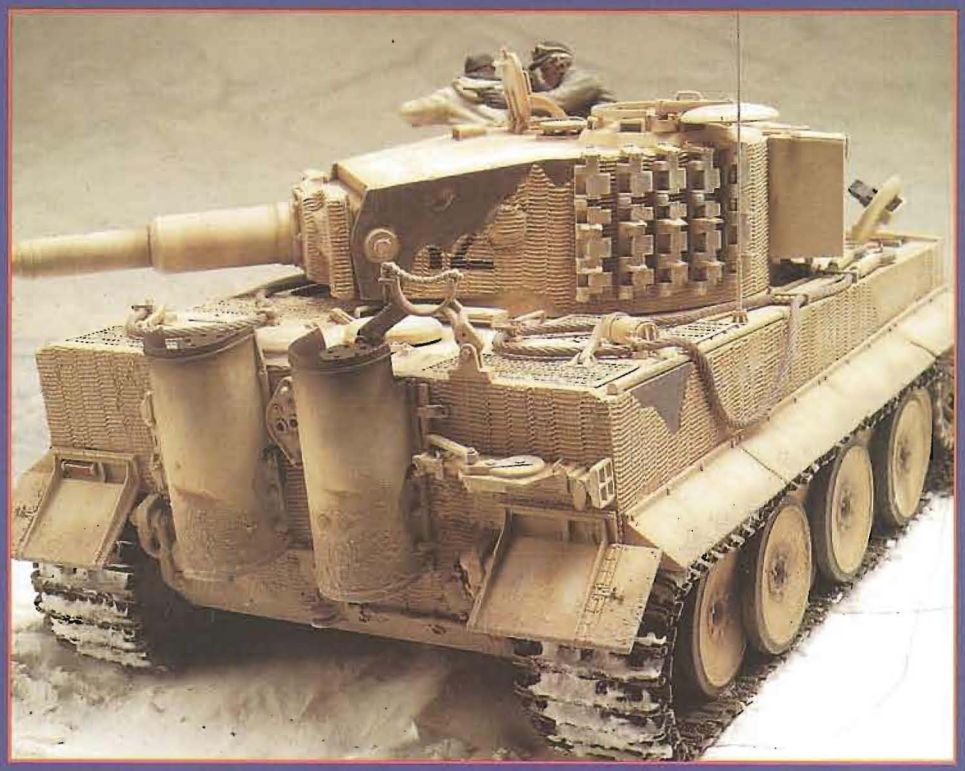
Bail Out!

Our Tiger in winter camouflage is a tank of the 506th Heavy Tank Battalion (Schwere Panzerabteilung 506) that was briefly attached to Schwere Panzerregiment Bake, a unit that was involved in the February 1944 encirclement at Tscherkassy. Panzerregiment Bake, consisting mostly of Panthers and Tigers, was a powerful unit which fought several fierce battles against Russian tanks and anti-tank guns as they successfully rescued some 50,000 surrounded German troops. Tanks from the 506th can be recognized easily by their distinctive unit badge which was a Tiger holding a shield emblazoned with a white cross astride a large 'W.' This was almost always stenciled on the rear of the turret stowage bin.

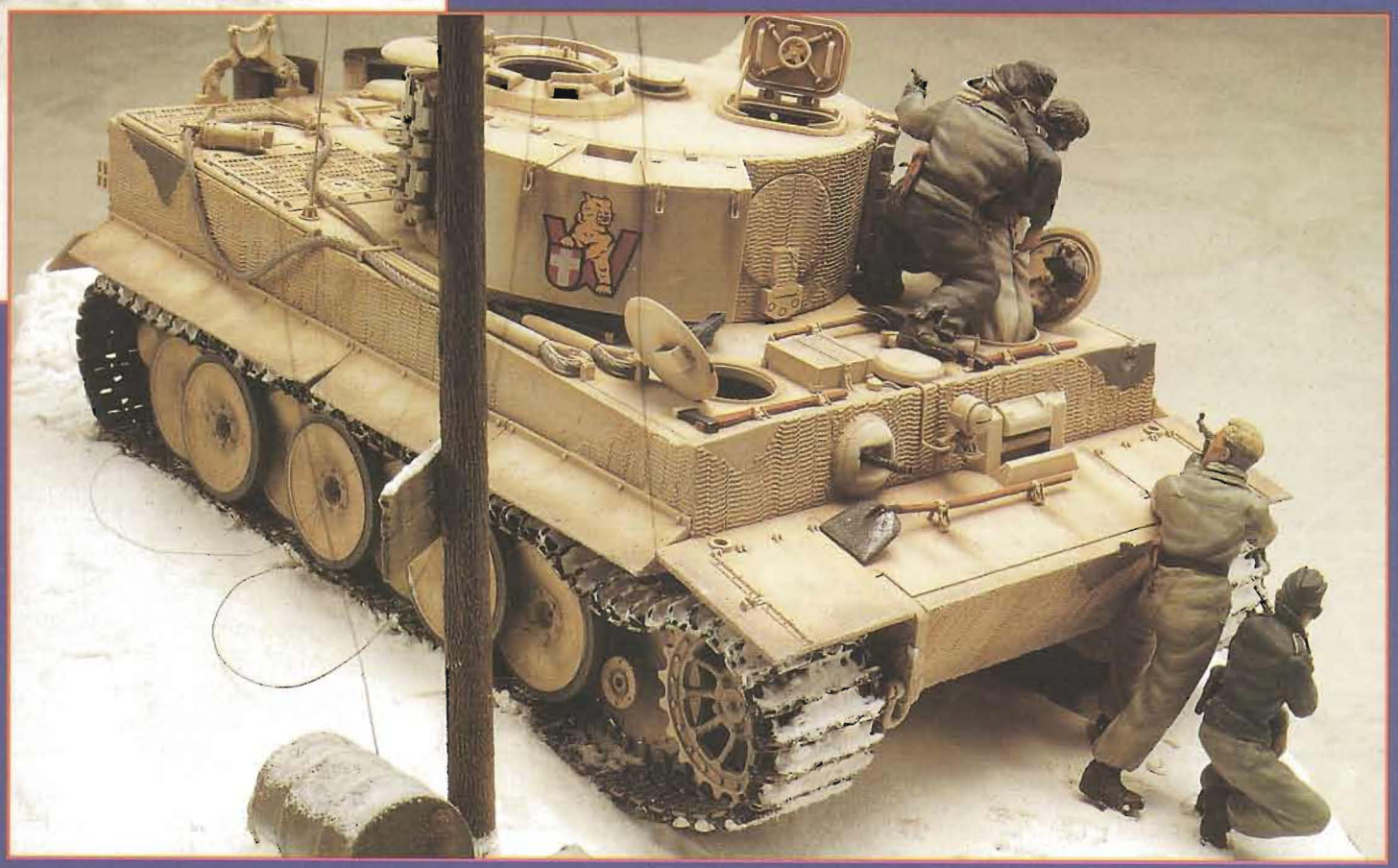
Strive for dioramas that tell their story with a glance!

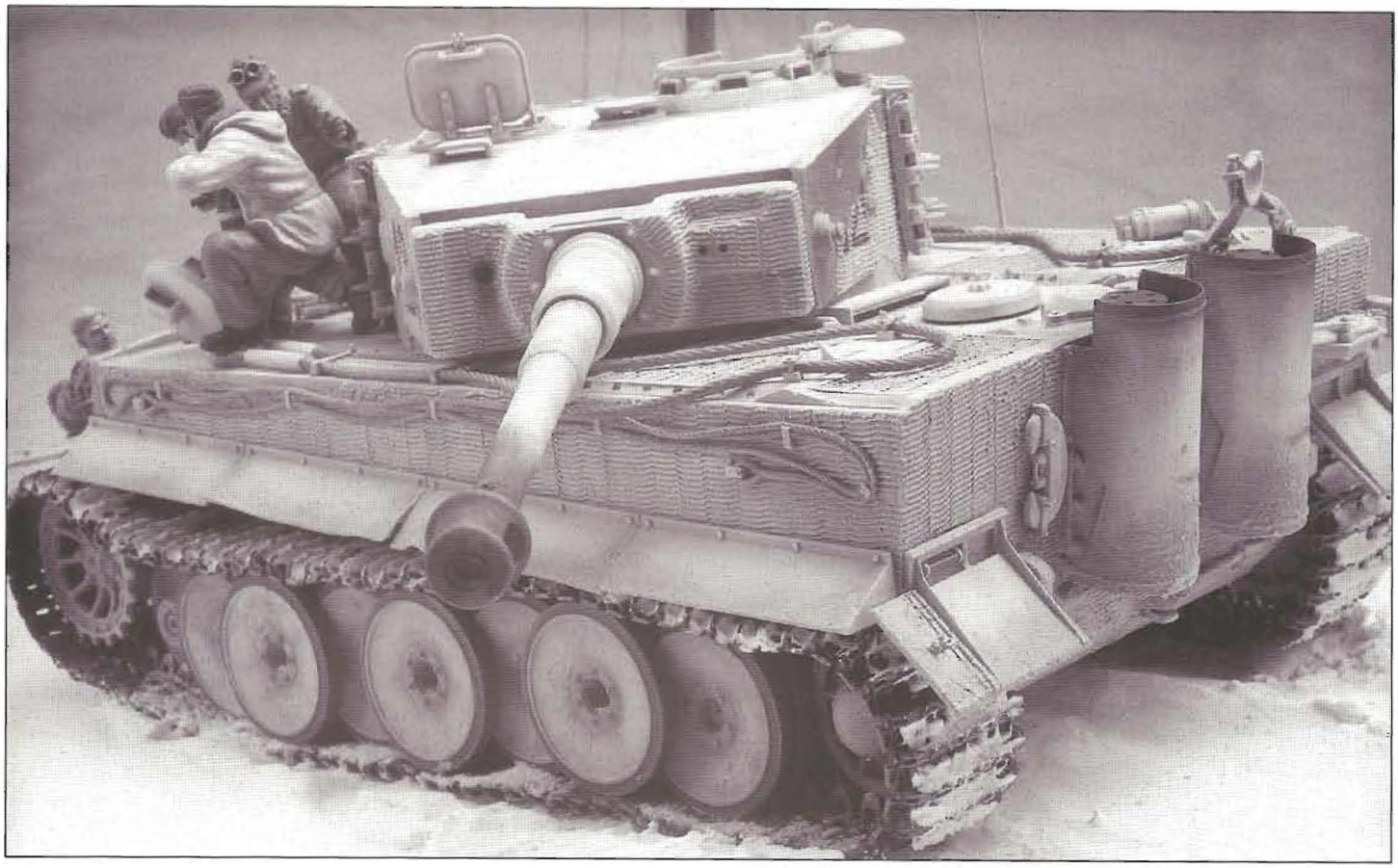
When you build a diorama, what are the steps that you go through? "Okay, I've got this really cool tank all finished, and I've got the latest first-rate figures from XYZ Co., so let's see... I need a base. Maybe I'll toss a couple of empty barrels or jerry cans into the open spaces." If that's a typical project for you, then you no doubt have a lot of dioramas of scenes that are vague, lack impact, and are more or less nothing more than highly-decorated display bases for a finished vehicle. If you're going to invest the considerable amount of time that a good diorama requires, you're going to want to make it look



like something out of a good European painting from the war. If it's a battle scene, it should convey tension. If it shows soldiers relaxing, it should exude an atmosphere of warmth or camaraderie. In short, it should tell its story with a glance, being perfectly clear to the observer exactly what kind of a scene it's trying to portray.

I like to call projects like this "story-telling dioramas" and I strive to make all my work meet this standard. Creating a diorama that jumps out and tells its tale quickly and effectively takes a lot of practice and skill. But when completed, works like these will get much more attention than the "decorated display bases" that so many people turn out.





Don't take the phrase "story-telling" to mean anything too grandiose. A theme like "stunned soldier learns of his fiancee's death in the Allied bombing of Hamburg and, wracked with grief, draws his pistol and begins firing at an unseen enemy swearing vengeance" would be just about impossible to put together in 1/35 anyway. Instead you should strive simply for a diorama that doesn't require you to explain anything about the scene to the viewer to appreciate it. In this diorama, the theme is "bailing out of a hit Tiger" and that's all. Then its up to the modeler to figure out how to best present that theme. Of course, this by itself doesn't add up to the kind of advice that you can immediately put to use, so I'll cover a few points that I think you may find useful.

First: creating the story. In order to get a feel for what you want to do, making a rough sketch of the diorama really helps. A few such sketches are shown in the back sections of the books of the "Models in Action" series. As you work on the sketch, you'll think of things you want to add or eliminate, and this process will help you create a work that isn't as confusing or vague as if you hadn't done any planning. These sketches don't need to be works of art; just something that you can interpret yourself as you put your diorama together. Taking this step in advance will help immensely when you begin the actual building. Should this hatch be open or closed? Where should I show damage on the tank? If you've done your homework, you won't need to ask yourself questions like this while you're building, and you can prevent unnatural elements from creeping into the final diorama.

The figures tell the story

Above all, the figures in your diorama are what will do the story-telling. Although it is possible to create a good diorama with just vehicles, getting an easy-to-understand story that way takes a great deal of skill and makes the whole modeling process much more difficult. The ideal situation is to scratch-build your own figures to fit the exact needs of what you have in mind, but pre-made figures, with a little work, can usually be adapted to do what you need them to do. One point that you need to be careful of is avoiding the use of figures in general poses that look like they could fit into just about any scene. Though they are easy to use, such figures seldom have any value from a story-telling point of view and add little if any impact to your work. If you can't or don't want to make your own figures, then fit the story to the figures you have available, rather than trying to make the figures tell a story they can't. The end result will be much more natural. Recently, firms have started releasing figure sets that tell a story all on their own (such as Tamiya's fine "German Infantry Mortar Team" set, no. 35193). Using one of these sets as-is for the centerpiece and then expanding the diorama from there is a simple and enjoyable way of producing a nice diorama.

Scratchbuilding and modifying figures is not an easy task, but something that just about any modeler can master with patience and practice. And if you hope to put together really eye-catching dioramas, it's absolutely necessary. Give it a try!

Proper layout is crucial to effective story-telling

To avoid having large open scenes, hard-to-understand scenes or having figures that you've spent hours completing ending up half-hidden, it's essential to think through the layout of your diorama before you complete it. One crucial point that many modelers overlook is the size of the base. Unless you're doing work that's going to photographed for a book or used in a movie, you should make the base only as large as absolutely necessary—just barely enough to contain all the elements of your scene. This is especially true for battle scenes. If you've got wide open spaces in parts of the diorama, you're going to loose a lot of the sense of tension that you're no doubt trying to convey. And many people cannot resist trying to fill dead spaces later with some random object that adds nothing, or more likely detracts from the scene as a whole. That's why it's crucial to plan the work in whole before you get started and, of course, before you select or build the base. Another point: don't forget to add some kind of vertical dimension to the diorama. Even if you don't go to all the work of constructing a building or trees, making the road sloped or adding a small hill will really liven things up. For example, in this diorama I added an electric pole, a very, very simple thing to model. But by then dropping down the cut power lines, I was able to quickly and easily fill one of the voids on the diorama's base.

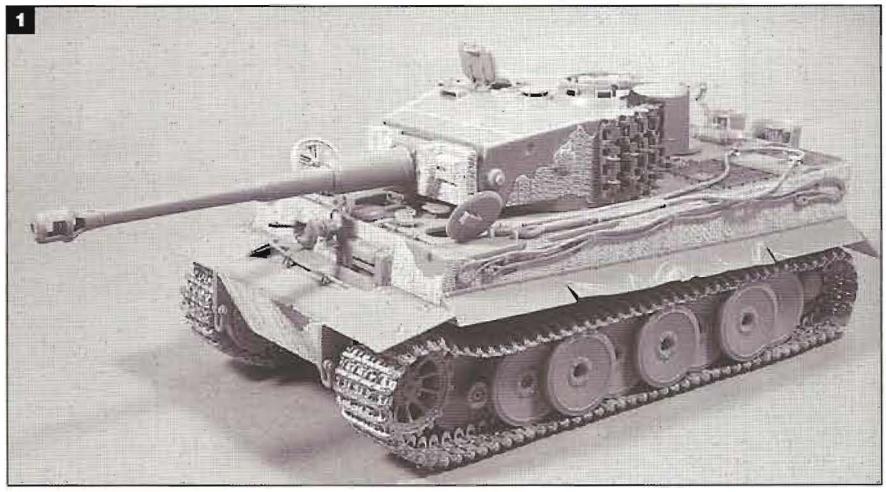
A word about vehicles

Super-detailing of vehicles is not that important in creating a good diorama. Just spend time on the portions that are actually going to add to the atmosphere you're trying to create. You have to be careful, however, that you're even-handed in what you do. For example, if you add a bunch of ModelKasten wing nuts to the kit, you're going to want to touch up some of the other areas as well or things will appear unbalanced. On this diorama, I did use the ModelKasten wing nuts, and played with a few other areas as well, like the towing cable lying on the top of the hull.

Story, figures, structure. If you get these three points down, you'll no doubt end up with a very nice "story-telling diorama." Even if you just keep using that same Tiger I kit, the possibilities are endless! Enjoy!

—Mashiro Doi
English translation
by Scott T. Hards

1. The tracks on this kit are the Friulmodellismo metal links from Italy. They are one-piece construction, but the openings in the center guides are formed very nicely, and they are well-shaped overall. Assembly is a breeze, too. Just put the links in the included jig, and fold the tabs over with a screwdriver or similar tool. They move smoothly and assembly only takes about an hour. They seem a bit too fat, but they definitely add impact to the kit. I bent the towing cable that was included in the kit and draped it this way to add realism. The only detail parts I used are Tamiya's photo-etched grilles, Show Modelling's stopper set A, and the ModelKasten wing nuts, pretty sparse compared to some other Tigers I've done. For the winter marking scheme, I first paint the whole vehicle white, then use dark yellow on the edges and highlights. The suspension, wheels and other dirty areas get a mixture of medium gray and flat earth. Then I give the whole tank a wash of medium gray to bring the various tones together, and then drybrush the highlights with flat white. A little work on details with pastels completes the job.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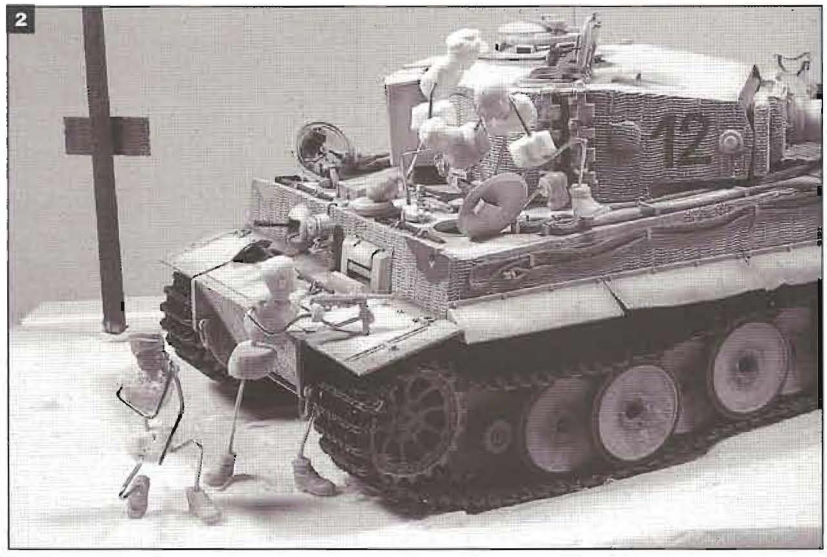
2. The figures are built by using brass wire to connect the heads, torsos, hips and legs. This allows you to easily set their poses. I then use coarse epoxy putty to flesh them out, and do their clothing with finer "modelers" epoxy putty for plastic.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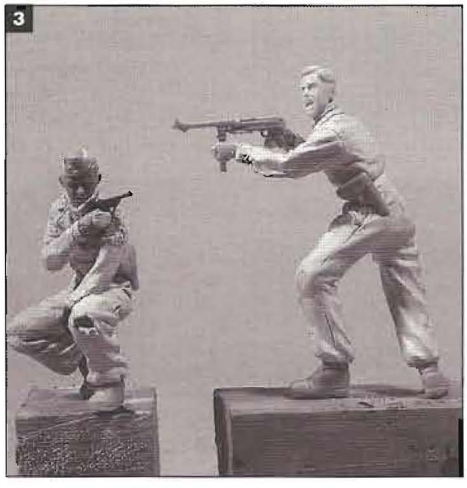
3. The head of the soldier with the MP-40 is from a Hornet spare head set. The yelling expression is done quite well. The head of the crouching soldier comes from the Tamiya late-model Panther kit. This figure, too, has a great face. I changed his cap from the SS type to the army style. In the photo, his gun is fixed temporarily in position with epoxy putty, but I painted the figure without the gun hand, adding that later. The painted gun was glued to the gun hand with the fingers removed. Then I made the individual fingers from epoxy putty to give him a good, firm grip.

4. The head of the commander figure came from a Cromwell set. His uniform is a denim work outfit with the skull marking on the collar, and the collar closed. The buttons and rank insignia were done with epoxy putty. I place a small dab of putty in position, then "cookie cutter" it with brass pipe. His belt buckle emblem and cap rosetta are done in basically the same way. His Knight's Cross comes from a Show Modelling detail set. The Luger is from an Italeri modern small arms set.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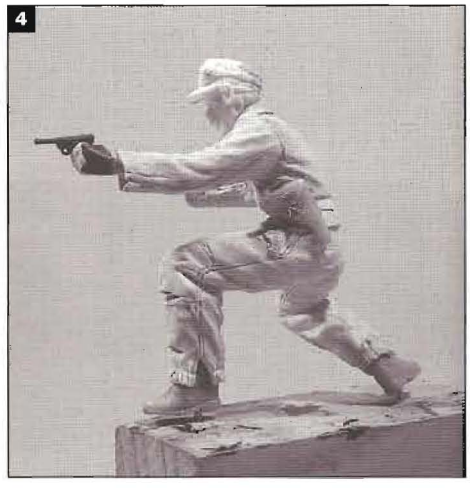
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5. The head of the wounded soldier is from a Cromwell set, though I messed his hair up a bit. The soldiers helping him out use Hornet heads, though I added their caps with epoxy putty. I paid special attention to the angle of the wounded man's head, and the direction the yelling soldier is looking. Details like this are what create the interaction between the figures and bring out the story.

5

MMiR RECCE

Tamiya Tiger I Mid-Production Model Commander Otto Carius. Kit number 35202. Kit graciously provided by the manufacturer. Suggested retail $63.00.

Friulmodellismo Tiger I Late Production Track Links. Kit number ATL-06. Kit graciously provided by Chesapeake Model Designs (for address see ad on page 12). Suggested retail $39.95.

References

Tigers in Combat I by Wolfgang Schneider. J.J. Fedorowicz Publishing Inc. 1995. Everything you want to know about the 506th. Great photos of the units tanks at the time of the incident described in the diorama. The distinctive "logo" of the unit is also shown remarkably well in a number of the photos.

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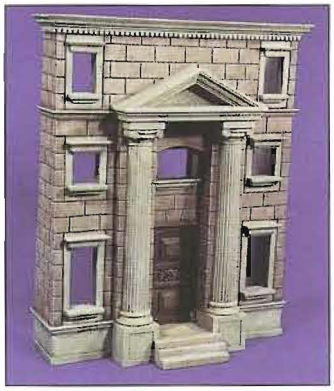

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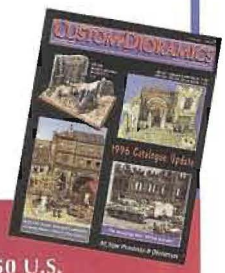

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North African Style

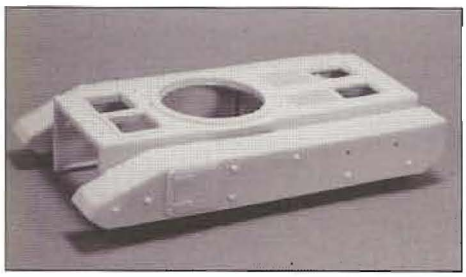
CHURCHILL

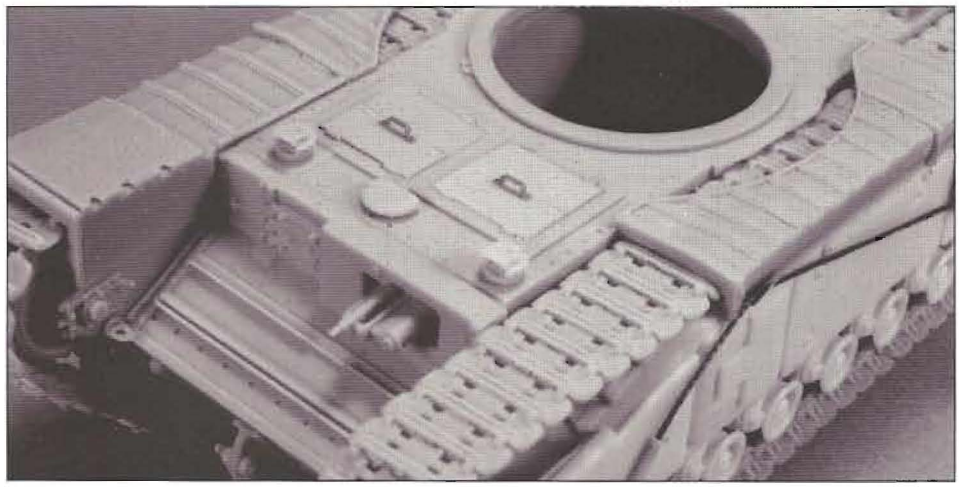
During the war in North Africa the six pounder Churchill MK IV tanks were incapable of firing high explosive rounds. They had to be accompanied by close support tanks and artillery in order to engage soft targets. To alleviate this problem, a solution was found where the six pounder would be replaced by a 75mm M3 gun mount and mantlet taken from derelict Sherman tanks. This expedient was a local conversion and work was done by the 21st Tank Brigade workshop in North Africa. In all, 16 base workshops carried out the conversions and over 200 vehicles were converted including one MK3. The new tank was known as the Churchill MK IV NA 75.

In the Churchill the gunner sat on the left side of the turret, while in the Sherman he sat on the right. The solution to this problem was the provision of linked controls which passed over the top of the gun and the addition of a new gun sight. The turret was cleared out and a larger opening cut for the new gun. A circular hole was also cut in the turret's roof for the positioning of the Sherman's periscope gun sight and the roof ventilator. The turret was set upright in a wooden jig with the gun opening upwards. Then the pre-owned 75mm was rotated 180 degrees so that the breech opened on the right, and it was lowered in and welded up.

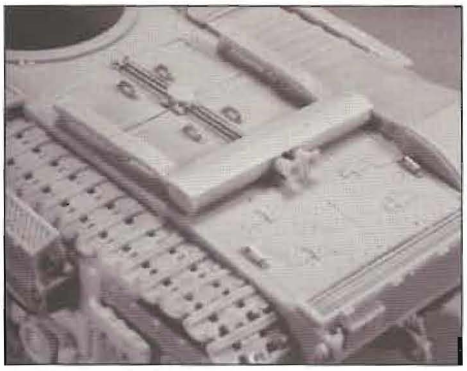
To avoid confusion with ammunition, the Besa was removed and replaced with a Browning machine gun so that both turret and hull machine gun were the same. As the war continued some vehicles reverted to the use of the Besa for better fire power and because of the difficulty in closing the opening left in the mounting.

This ingenious method of up-gunning the 75mm gave the Churchill a much better capability in firing armor piercing explosive shells. It also removed the darkened mantlet opening which was an aiming point for German anti-tank gunners. It was used in battle in North Africa and Italy and soldiered on





Above and left: the hull under construction. The shot at left shows the basic configuration of the Resicast Churchill prior to construction. This is not the variant constructed here, but all the kits are configured the same.



More progress photos, everything is either resin or photo-etched. Above is the rear fender stowage tray.

until the new British 75mm dual-purpose gun was available for the Churchill in 1944. The new conversion was thus an all round success and a brilliant improvisation.

The Resicast Churchill

Resicast's kit is packaged in a stout box with bubble padding with the individual resin pieces in little plastic bags. It is recommended for the expert modeler and instructions are provided in English and French.

The resin casting is superb, there are no warped parts and few bubbles are evident. The instruction sheets list the parts and give you several views of a completed model for reference with several close-ups of the turret. Excellent book references are also cited.

The resin parts are identified by letters or numbers and the sequence of the instructions is easy to follow. Frets of photo-etched brass are provided for the more delicate details on the kit hull and turret.

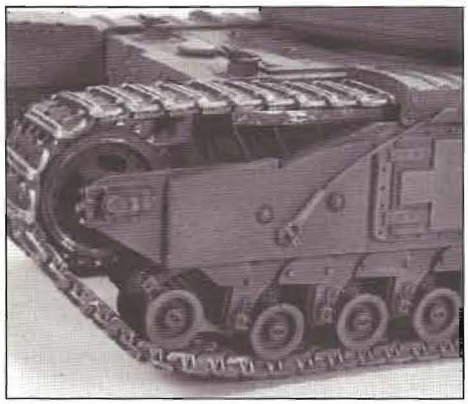
There are over 150 resin parts in the kit and they are all exceptionally well cast. To ensure fidelity of the cast pieces, large plugs and runners are incorporated in the molded parts. These plugs are cut off using a scroll saw, making preparation quite fast and easy. All resin parts are sanded on a flat sandpaper surface using a figure eight motion. Superglue was used throughout.

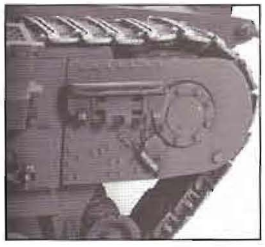
The assembly instructions were carefully followed and the kit was built-up in various sub-assemblies.

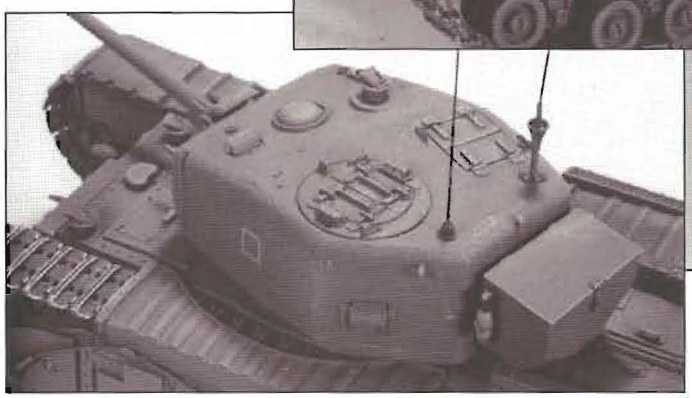
On the main hull the driver's visor installed in the closed position and the sponsons and rear transmission were attached. The idler support plates and brass track reinforcements are also applied now. The running gear is assembled next, with idlers and road wheels. Two armor plates were missing and these were easily copied from a plastic sheet and glued on. I decided to show the mud guards missing from the side of the tank in order to display the superb detailing by Resicast. The kit offers enough extra track to do this so the option is left to the builder. The hull details are assembled next and they required little sanding for an accurate fit. Resicast provides many options in this area so hatches and compartments may be left open or closed. They also provide a Bedford engine and mechanic as a separate offering which can be incorporated into any of Resicast's Churchill kits.

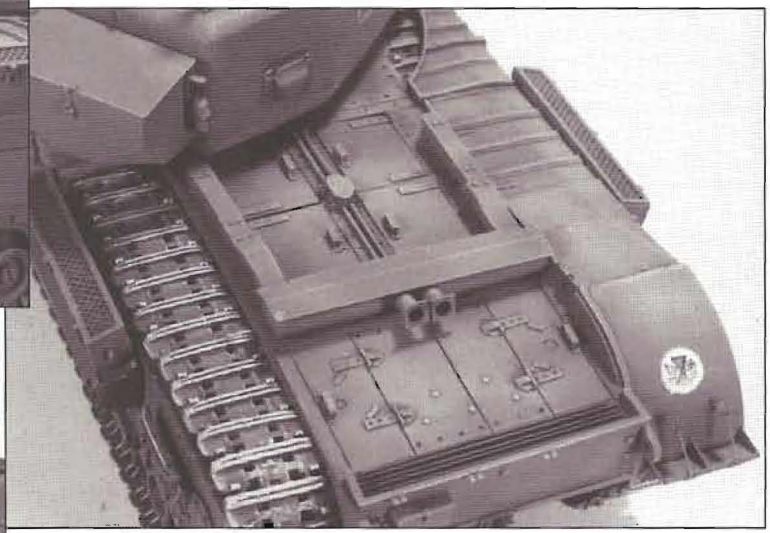
The towing shackles and cable ends are excellent and even have little securing pins cast on the ends. Cable supports and holders were added from brass sheet using the references as a guide. One extra track shoe was drilled out and a pin added. It was then attached to the hull. The other side shows an empty track holder. I replaced the rear oil can holders with better detailed ones from my parts box. The extra side armor plates provided are superb and show torch-cut ends.

One minor inaccuracy on the kit is the side sponson bolts. There are two bolts on the bottom of the starboard side while the port side has two bolts on the top. This was easily fixed by moving one of the bolts and inverting the added armor plate on part R3.









The above photos show off the many fine details of the Resicast kit. I left the sand shields off the port side of the vehicle in order to reveal more of this detail. At left is the turret. There are a plethora of photo-etched details supplied, among them the antennae guards, the track guides (above right) and the rear fender stowage trays.

The turret is assembled next and this also gives options for open or closed hatches and room for a tank crew, too. The turret has well defined weld beads molded around casting joints. Antennae were made from piano wire for the A and B radio supports and glued on. No decals or tools are provided but these can be easily substituted with parts from your spares box. A tarpaulin is provided to hide the tool storage area. I decided to omit mine as Churchills were notorious for starting fires whenever flammable items were stored near the exhaust system.

Painting and "Finishing"

The vehicle was painted with Humbrol paints. A coat of Dullcote with some black added was then sprayed over the entire vehicle as wash. It was then drybrushed with the original color plus a little yellow ochre. The tracks were painted dark brown and washed with black artist's oils. Highlights were picked out in silver since the tracks tended to be very shiny due to the high manganese content. Decals were obtained from my scrap box and depict the 21st Army Tank Brigade (Diablo) with unit markings for the 48th Royal Tank Regiment in Italy.

Resicast has provided a superb kit with well detailed parts, many options for tracks and hatches and great forethought was shown in casting with all seams being hidden. The excellent references cited were used for checking fine details. This kit is well designed and is the most accurate Churchill on the market. It was a pleasure to build and I look forward to building some of the "Funnies" and other vehicles from Resicast's range of vehicle kits and conversions.

—Carlos D'Arcy

MMiR RECCE

Resicast Churchill NA 75. Kit graciously provided by the manufacturer. Suggested retail will vary on the source. Red Lancers is one of the few U.S. reps, but you may also write directly to Resicast at Veiux Chemin de Binche, 7000 Mons, Belgium.

References

The Churchill Tank, Bryan Perrett Vanguard #13 Osprey Publishing, London, 1980.

Churchill - British Infantry MK IV B.T. White, Profile Publications Ltd., 1971.

The Universal Tank, David Fletcher, HSMO Publications, 1993.

Tamiya Photographic Album of British Churchill Tank, Tamiya Plastic Model Co.

The Churchill Tank, Chris Ellis - Tanks Illustrated #25 1987.

The Churchill, Bryan Perrett, Ian Allan Ltd., London 1974.

The Churchill Tank, Chamberlain and Ellis, Arms and Armor Press, 1971.

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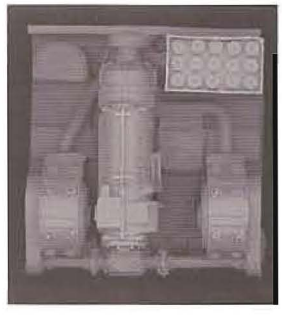

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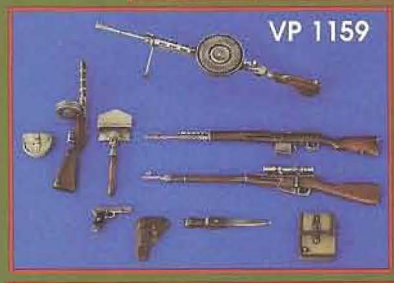

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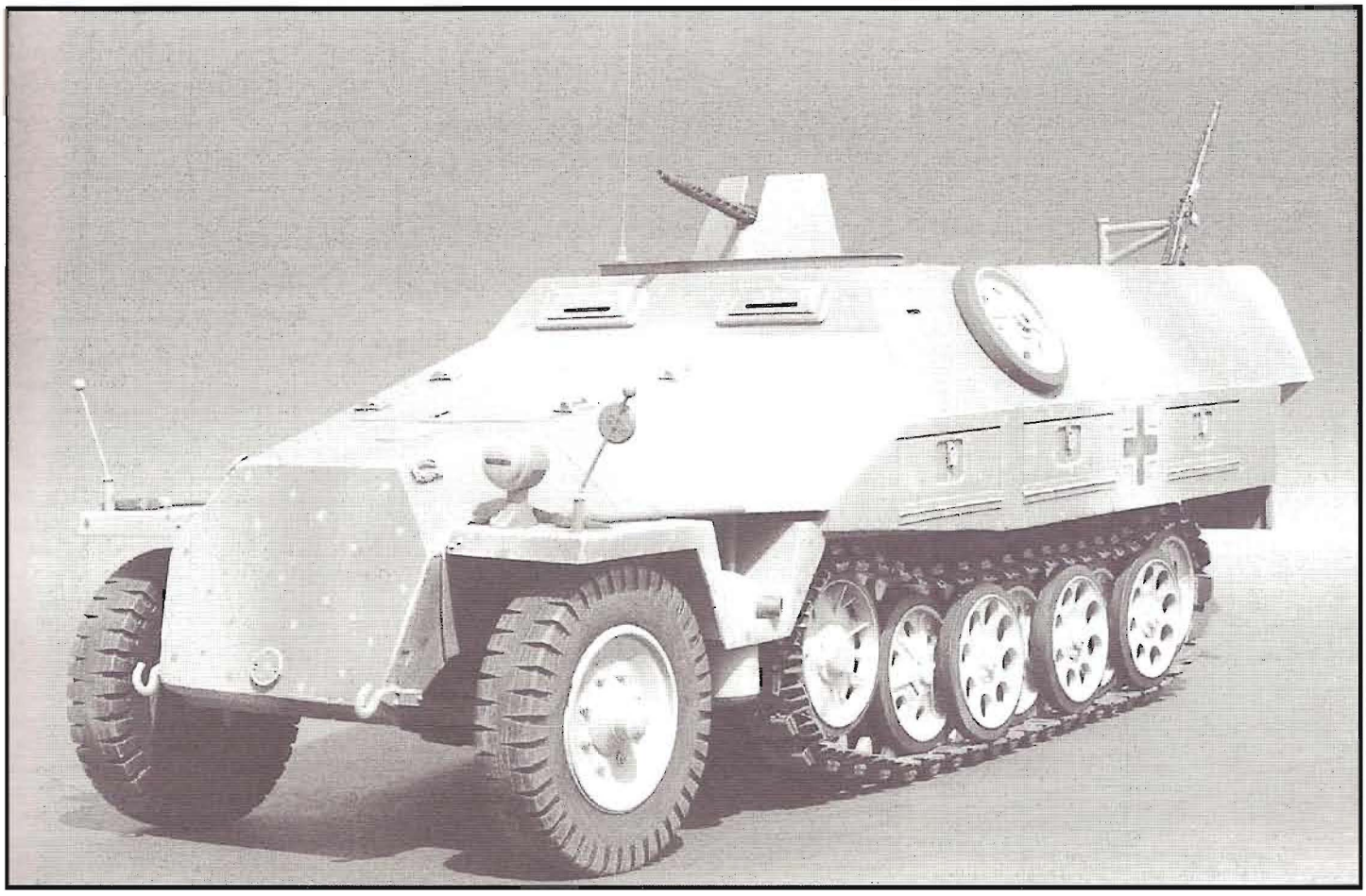


I swore after my experience with a horrible 1/15 scale 88 (the manufacturer of which shall remain nameless, but it's abbreviated Frontline Miniatures) that I'd never build another big scale kit. However, our esteemed editor was just dying for me to do this one. Examination of the kit revealed nice casting and fit, so I went for it.

This half-track has been aptly called the "war horse of the Panzergrenadiers." Constructed in a bewildering variety of types (either 23 or 24 depending on which source you believe), this kit builds the base model, the infantry carrier. This is the "D" model, the later version simplified for mass production. Tamiya builds the "C" and "D" types but this is the only big one.

The first thing the resin kit devotee will notice about this model is that there are no huge chunks of excess resin. (I filled a vacuum cleaner bag with ground off resin building the "other kit"!)

This makes for much better utilization of your modeling time. You won't have to spend a weekend in a dust mask, slaving over a hot belt sander or whatever way you remove plugs. The downside of the kit is that it is very rudimentary. For example, the front suspension has five parts including the wheels. The same part in the Tamiya kit has twelve parts, and the front wheels can be posed at different angles, while the big guys are fixed straight ahead.

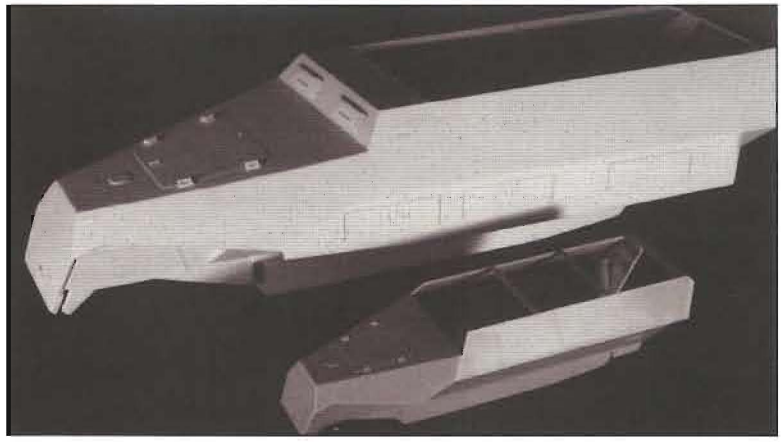
Some things, like the bottoms of the stowage bins, just aren't there; I had to build them out of sheet styrene.

The plans are equally basic, consisting of a couple pages of line drawings. The front suspension drawings are flat wrong, showing the axle/front spring upside down. My advice is to get out a set of Tamiya plans; they make a valuable reference, as the Shirley kit is very close in parts breakdown to the littler one. You'll also need it for painting instructions.

Construction

Got a drill press? You're gonna need one. The front wheels and the torsion bar mounts all need to be drilled out, and they can't be wonky if you want the thing to sit on its suspension correctly. I've been needing one forever, so this gave me the excuse to buy one. Bench top models can be purchased for around $150, and they're perfectly adequate for a modeler's use. Dremel also makes one in a smaller size to fit the standard Mototool.

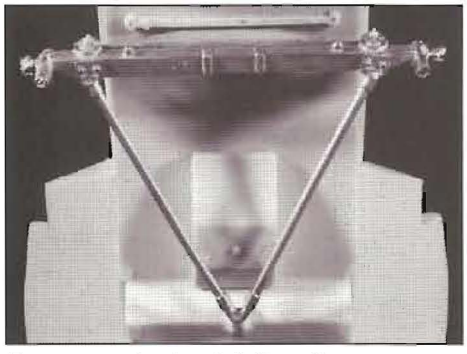
After the drilling, it's time for paint. All the parts need a good wash in soapy water before you start, otherwise you'll be putting on multiple coats. The drive sprockets (excellent casting on these two part assemblies), road wheels and front wheels



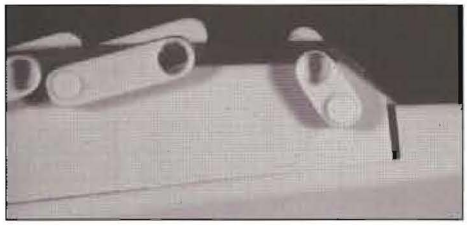
The massive hull, with a Tamiya 1/35 Ausf D hull in the foreground.

The inner rim on the 'close' road wheel conflicted with the guide horn on the track. At first I thought of just removing the slot as shown, but then I just took off the whole rim. The modification is completely invisible with the track installed.

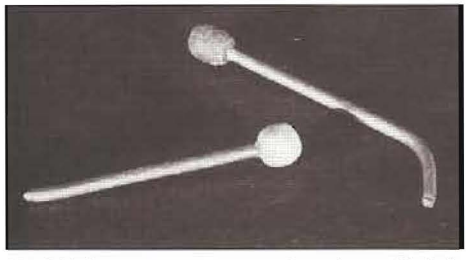
The drive sprocket is a very nice two piece casting.



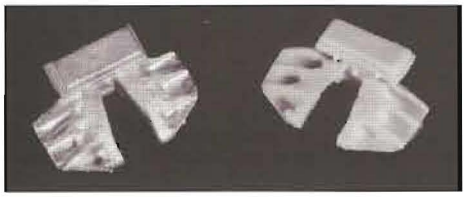
Front suspension is painfully radimentary as compared to the 1/35 Tamiya.



The plate holding the torsion bars was a bit short.



No shift lever or transfer case lever is provided; I made them out of big paper clip wire.



Metal track shoe on the left, with the resin one for the drive sprocket on the right.

need to be given your choice of the base coat. I used Pactra Africa yellow. Drybrush the wheels, and paint the tires black. This will take a while, 'cause the stuff is big. Next I assembled the front suspension. Like I said above, not much to it. I did a test fit of the upper hull and then put on the front fenders and the suspension units. These are flat pieces of resin with the torsion bar arms for the tracked part. They had gaps at each end of their mounting slots, in other words the parts are a bit short. I filled them with Plastruct angle.

I assembled the "wide" set of road wheels. A quick test fit of the "close" road wheels showed the mounting pins to be too long. After shortening them, I did another test fit with the drive sprockets. Guess what? The pins were not too long. Sometimes I amaze myself, I'm such a dumb ass.

I called the manufacturer, groveled, and they sent me some new ones. While I was messing with the "close" road wheels (I hadn't assembled them yet), I tried one of the track links and discovered that the inner rim conflicts with the guide horn. I had to choose between grinding down the guide horns on 90 track shoes or removing the rims on 16 wheels. I took the rims off. After all, they're on the inside and invisible after the tracks are on.

While waiting on the suspension parts, I began on the interior. There are some strange omissions here; a hand brake lever is provided, but no gearshift or transfer case lever. I made these out of big paper clip wire (we've been advised at work to recycle these things, so I'm doing my part) with plastic knobs sanded to shape after attachment. Appropriate holes have to be drilled, of course.

Meanwhile, I did something else stupid. There are resin shoes provided for the drive sprockets; they have no guide horns. Instead of paying attention to the instructions (which say to cut driver teeth off that conflict with the resin parts), I tried to make the teeth fit the shoes. My problem was that I didn't recognize the little bar between the ears of the shoe. There are replacement drive sprocket teeth, so you can cut the teeth off without worrying about the sprocket being toothless. I removed all the bars on the shoes. It was obvious right away that the shoes had become incredibly fragile, but did that give me a clue? No-o-o-o-o! Not me! I sanded the shoes; they broke. I sanded the teeth; they still didn't fit. I said many, many bad words. Then I realized what I'd cut away from the shoes. More bad words, lots of 'em. Another call to the manufacturer, more groveling. They hadn't sent the other parts yet, so they saved freight costs by sending one package with another set of resin shoes. They were quite nice about it, although I can imagine what they said after they hung up ("Hey, it was that Joe Moron, again. You won't believe what he screwed up this time!"). What made this more aggravating was that each link had to be painstakingly painted, so about an hours work went down the drain. Aargh.

Once the drive sprockets with their shoes are in place, the road wheels can go on. The torsion bar mounts are fragile after drilling to the right size, so each mounting pin must be sanded to fit. Each wheel set can be placed (it takes a little juggling skill to get 'em all on), and then gently pressed into position, lining up with the drive sprocket. There is a major glitch here: the last road wheel set, which acts as the idler, does not fit. An examination of the mounts showed why. All the mounts are spaced at 24mm except for the last one, which was at 20mm. Since the tolerances here are very close, it was a no-go. Figuring that what doesn't show won't kill me (I don't do competitions), I sanded away enough of the trailing wheels to fit the axle of the wheel just before. This, like the road wheel rims, is invisible with the tracks on. The only give away is the proximity of the hub to the wheel in front compared with the preceding ones.

I set to work painting the metal track links. I did this by brush, as spraying all the nooks and crannies didn't look any faster (it probably was). After a coat of red brown, I went back and painted each rubber track block tire black. I drybrushed the rust part with gunmetal. The undersides of the shoes where the road wheels contact I left natural metal. Needless to say this took a while, off and on a whole day. After I put the tracks on, I didn't like the way the natural metal looked, so I painted what I could see. I left the guide horns metal.

Using a track jig, I assembled lengths of track. The ears on most are tight enough to allow a 'semi-workable' track with no glue. Gently pinch the loose ones together to make them work. Because the road wheels are so close the tracks can be assembnnled the easy way, in short sections. This is helped by the fact that the 'close' road wheels and the guide horns are a press fit.

Very little glue is needed at all. The last section can be adjusted for length to fit the gap. Make sure this comes out on the bottom. With all the individual link jobs I've done, I still ended up with one side mating up on top in the most obvious place. This almost caused me to have a heart attack, 'cause it seemed like I wasn't going to be able to bridge the gap. Something about this kit just made me stupid, I guess.

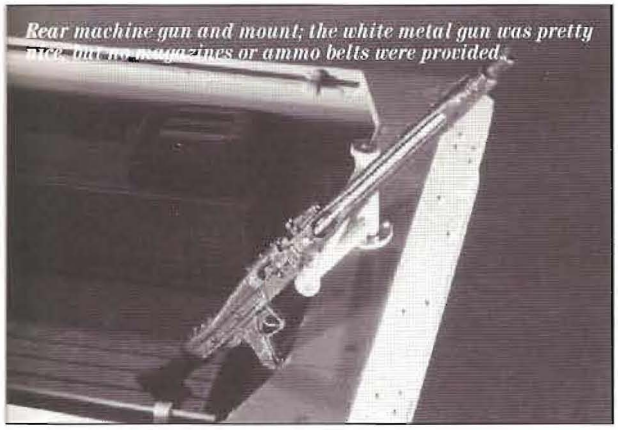
Now all the interior bits can go in. Wait to put the back rests and the radio operator's seat until the hull top goes on. The seats have wooden slats; all the photos and drawings I have show these to be upholstered pads. Of course everything has to be painted first. To create some contrast inside, I painted the frames of the driver/radiomans seats in Panzer gray, along with the radio. Paint all the dials and switches on the radio and the dash, checking your references for details. There's a pretty good color drawing of a dashboard in Culver's Osprey book.

Now for the hull top. Put the muffler on first; I didn't, and I had to cut it in half to mount it. You also need to add the header. The top isn't the best fit I've ever seen, but it isn't the worst either. You'll need some filler in spots but not an excessive amount. My dislike of putty is another reason why I don't build airplanes. There was a problem with the "left and right body panels," as the forward undersides of the body are called. I got these properly seated on the ribs that locate them, but they still protruded from the underside. I ground off the corner and feathered the part toward the lower hull side. These parts should actually be cast thinner to eliminate this.

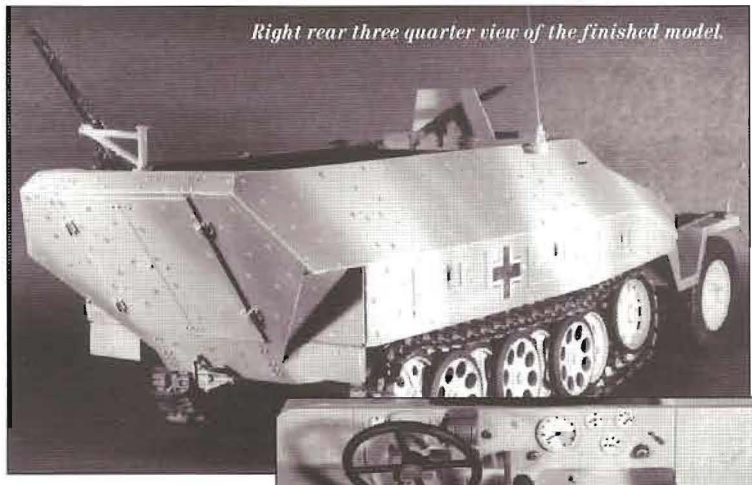
I'd already added some pieces of Plastruct angle to locate the bottoms of the stowage lockers. I cut these from .030 Plastruct sheet. A little cutting and fitting, and they were in. Then I put the radio in. See why the operator's seat can't go in 'til now? Finally, I flipped the big devil upright.

Make sure that everything is done on the bottom, because when you begin putting on the upper hull parts, you aren't going to be able to turn it upside down without breaking something.

I added the forward gun mount, the semicircular splash shield on top of the drivers/radio operators position. The big knob at the back can be sanded flat, as trying to drill the gun shield to accept it is asking for trouble. I then positioned the shield and glued it in place, cleaned up the rear machine

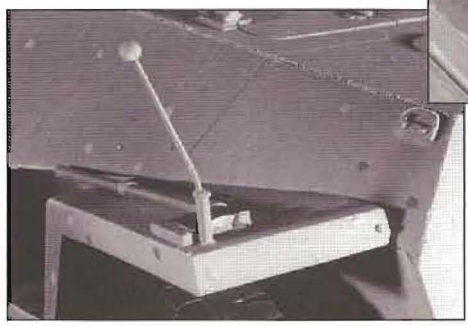


Rear machine gun and mount; the white metal gun was pretty nice, but no magazines or ammo belts were provided.

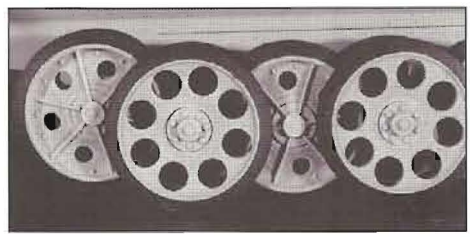


Right rear three quarter view of the finished model.

Above: the dashboard installed and painted. There's a good color drawing in the Osprey book.



Above: the light wiring detail was taken from the Tamiya box art. Ball ended pins replaced the kit parts, which were impossible. Right: The only giveaway to the butchered last road wheel set is the spacing of the hub to the preceding set; notice the last (cut) one versus the spacing of the set just in front.



gun mount, drilled its hole (.120), and glued. Only one white metal leMG42 is provided, but on one of my calls to the company I brought this up and they sent me four (!) more. I really think two should be provided (and maybe they are). They are expertly crafted but should have either ammo belts or magazines, too.

The grab rails along the top inside came next. I drilled the supports out (.055) and threaded them onto the plastic rod provided. (The pieces are the right length.) I glued the supports in place one at a time; the rod is springy enough to allow this.

Funny thing about these: all the pictures of these vehicles I've looked at (must be thousands) and I'd never noticed them before. When I went back to look just for them, there they were.

The rear doors can go on anytime now. Mine were a bit short, so I put a piece of Plastruct angle (I love the stuff, at least on this kit) across the bottom of the opening. One of the operating rods on the inside was missing, so I made one from wire.

Now to the outside. The fender markers are two little resin balls and two bits of plastic rod. I have an aversion to drilling holes in my fingertips, and trying to drill these balls looked to me like an excellent chance to do just that. They looked familiar, though, and xI placed them. They're the same size as the balls on the end of pins. Get the picture?

I drilled the white metal mounts for pins (.030), cut the pins to length, put a bit of bend in the end and I was home free.

The mirror goes on the left pin/fender marker. I didn't think it would look right just glued on the pin, so I made a bracket from a leftover piece of brass. The front tow hooks came next; they belong at the angle where the front plate breaks to the bottom.

I then drilled the mount for the Bosch headlight. There's an excellent shot of what it should look like on the box art for the Tamiya D. While doing the lights, I went back and put on the taillight, hitch and handle. I drilled the hitch and put in a piece of wire bent into an "L" to finish it off.

Hey, we're ready for paint! After masking off the suspension and interior, I gave it a couple of coats of Pactra Africa Yellow. This was followed by bands of Pactra Marine Green and Rust (yeah, yeah, these are real bright, I'm not done yet). I went back and applied ambush scheme dots; yellow dots on the green, yellow and green dots on the red, and green dots on the yellow. Then the whole thing got a very light coat of yellow, which tones down the red and green. Lastly, I drybrushed with light tan.

No markings are provided, so I sprang for a set of Verlinden's set 867, which is called "German Tank Markings, WWII." For your eight bucks, you get six balkankreuz and some numbers that are so huge I can't imagine what they possibly fit. No division signs, no tac markings, no stencils. Well, I needed the crosses and I don't know that anyone else makes them in this scale.

No stowage is provided in the kit. Once again, Verlinden to the rescue, and in this case their 0940 provides six gorgeous jerry cans (but pricey at $18) with "1941" and "Wehrmacht" right on 'em. For those of you who really want to load this monster up, Verlinden has a huge amount of German equipment. All the open space in this thing just wants to be crammed with after market gear. It's strictly up to you and your wallet.

Conclusion

This is not a particularly difficult model to build, but the sheer size of it and my lapses into idiocy made it a lengthy process. The finished model scales out, according to my sketchy math, very close. My main gripes: it's too rudimentary, and the front wheels don't touch the ground by the distance of the track blocks.

I did build the model pretty bare, but the scale practically begs for super details. You could spend many, many hours (weeks, months, years, decades) detailing this beast. Stuff you wouldn't even attempt in 1/35th would be easy in this scale. It also struck me that some fanatic out there may want to convert this to the "Uhu" searchlight vehicle. Super detailed or not, it is an extremely impressive looking model!

—Joe Morgan

MMiR RECCE

1/15 SdKfz 251/1, Ausf D kit: Jim Shirley Productions, 120 Vista Oak Dr., Longwood, FL 32779. Phone (407) 333-4407; fax (407) 333-0220. Kit graciously provided by the manufacturer. Retail price: $385.00

Verlinden German Tank Markings WWII #867 ($8.00) and Verlinden German Jerry Cans #0940 ($18.00), 120mm: VLS, 811 Lone Star Dr., O'Fallon, MO 63366.

References

The SdKfz 251 Half-Track, by Bruce Culver, Osprey-Vanguard 32, Osprey, London, 1983.

SdKfz 251, by Janusz Ledwoch, Wydawnictwo Militaria, Warsaw, 1994. (Best of all for drawings of all the variants)

Schutzenpanzerwagen, War Horse of the Panzer- Grenadiers, by Horst Scheibert, Schiffer, Atglen, PA, 1992.

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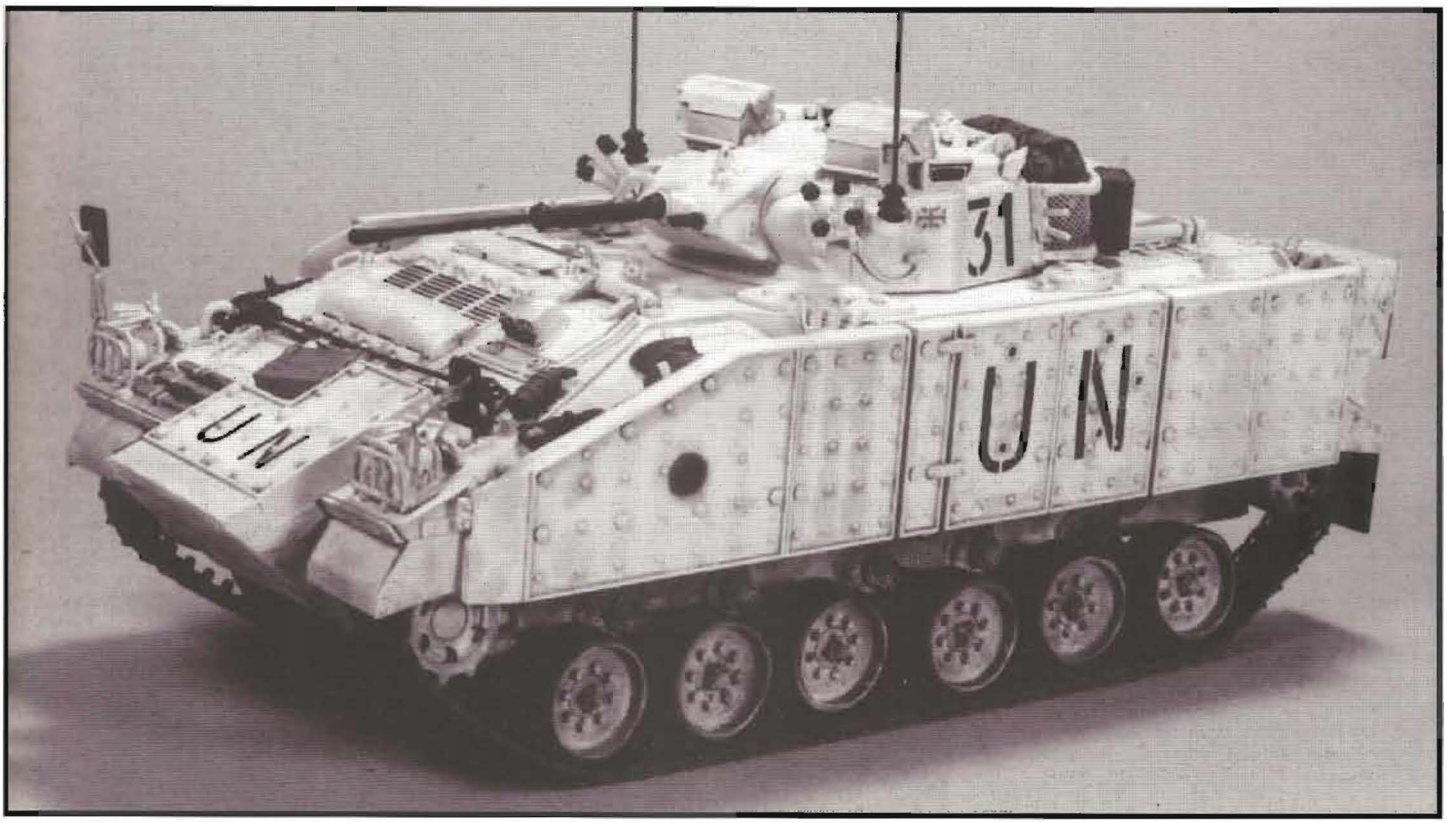
British Warrior



Design and development of the British Warrior MCV-80 (Mechanized Combat Vehicle) began in the 1970's. The G.K.N. and Vickers companies were invited to submit bids for the program and G.K.N. was awarded the contract.

The Warrior was the replacement for the aging FV-432, which is similar to the American M-113. At the same time the Americans were also embarking on the program that would create the M-2 Bradley infantry fighting vehicle as the replacement for the M-113 APC.

The Warrior and the Bradley differ in several ways. The Warrior does not provide a means for troops to fire from within the relative protection of the vehicle as the Bradley does. More importantly, the Warrior was not designed to have an anti-tank weapon as an integrated part of the vehicle as the Bradley does with its twin TOW missiles. The Warrior lacks the gun stability system that allows a Bradley to fire on the move and its main gun elevation and rotation are manually operated.

The Warrior's main armament is the 30mm Rarden cannon mounted in a fully traversing turret (this is the same gun mounted in the Scimitar). This gun is larger than the Bradley's 25mm Bushmaster cannon.

Prior to the Warrior's first combat debut in operation "Granby," or Desert Storm to those of us on the other side of the pond, the Warrior was up-armored with add-on kits designed by Vickers. These armored kits are believed to included the same type of composite Chobham armor used by the Challenger.

Deployment of the Warrior began in 1988 with the first battalion Grenadier Guards stationed in Munster, Germany. The Warrior is also the basis for a variety of specialized variants including a command and control vehicle and an anti-tank vehicle.

I am the Warrior

The kit is made of injection molded tan plastic and includes a sheet of mesh for the turret basket and thin rope for the tow cables. The kit comes in four large sprues each separately wrapped with tracks that are of the one-piece vinyl type. The decal sheet includes markings for three different vehicles: a British Army of the Rhine (BAOR) vehicle from West Germany circa 1990, a Desert Storm vehicle, and a peacekeeping vehicle from the British contingence in Bosnia-Herzcegovina with U.N. markings. These markings seem to have been taken from the color plates in the new Osprey Book (New Vanguard #10) on the Warrior.

Interior detail on this kit is limited to the inside of the hatches, which is disappointing considering the excellent interior in the Academy M-113A2. This does leave an opportunity for the after market people to pick up some slack. There are some inaccuracies in the kit that I will get into as they arise.

The first step, as with all armor kits, is the construction of wheels, sprocket and idlers. These clean up easily and feature ye olde poly cap. The suspension arms (A-27 and A-28) are awfully anemic and fit loosely in their mountings. My advice is to position them as high as you can to the hull. If you put them at their lowest rotation there will be trouble when mounting the tracks. They are as tight and unforgiving as any vinyl track I have used. Think slack man.

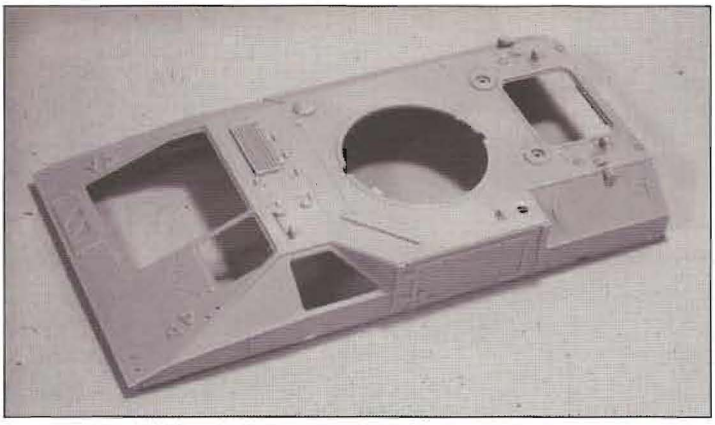
When mounting the drive housings and idler mounts, use superglue. Otherwise the taut tracks will rip them right off your model. If you are a modeler that likes to take the wheels off for painting, I'd suggest strongly against it.

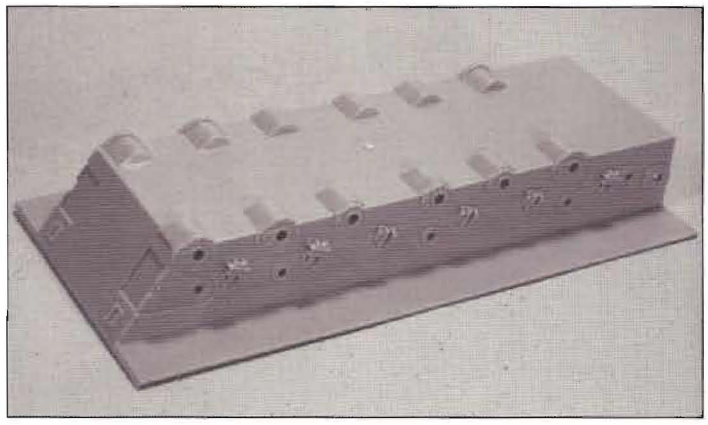
If building the U.N. or Desert Storm version do not use part B-15, which is a front step. There is no photographic evidence of this and most Desert vehicles had a simple steel bar welded between the drive housing and the front stowage bin.

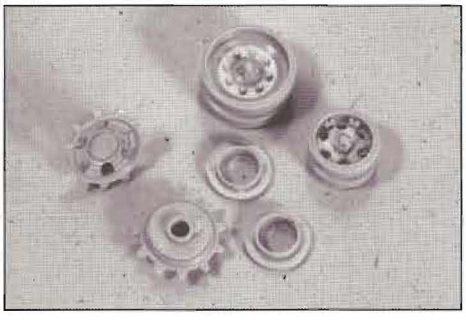
The fire extinguishers (part A-51) for the rear door are the hand-held variety and improper for this vehicle. No decals are provided for them, but you can steal the right kind from one of Tamiya's British offerings or from Accurate Armor. The rear door does have some interior detail, so it can be posed open. I added wire to the communications wire spool from thin Hudson & Allen solder.

The instructions suggest joining the tracks with the famous hot screw driver technique. I decided to use superglue and set them aside for painting.

The engine deck is a separate piece with lots of tiny details. It was tedious work, specifically the grab handles (parts A-47), but it's impressive when complete. The driver's hatch has some interior detail and can be opened and closed. I drilled out the headlights and installed M.V. lenses (#185). Power cables were added to the lights, but this is mostly hidden when the brush guards are installed. I was a bit disappointed that the enormous hatch







Above: the top and bottom of the hull. Although no interior in provided the large openings offer plenty of opportunities for scratch-builders or aftermarket companies. At least there's no motorization holes! Left: the suspension components.

located on the left side of the vehicle (for the NBC system) is molded to the hull. It would be a pain to remove it if you wanted to show an interior.

The rear stowage boxes are built in step 7 and are no trouble. The mud flaps were set aside to be added at the end of the project. Parts A-23-26, the "pinheads" as I call them, (after the pointy faced villain in the Hellraiser movies) are mounts for camouflage netting. In real life they are hollow, but I'll be darned if I could find a drill that tiny.

In step 8 you mount the side skirts, if doing the Desert Storm or Bosnian vehicles, do not use parts C-28-29. You cannot add the skirts until the tracks are on.

The brush guards for the headlights are a bit beefy and part C-10 does not fit correctly with the hinges. On the 1/1 scale Warrior, they are hinged to the top of the hull so crewmen can replace burnt out/shot out headlights easily. The hatches on the top of the rear hull open, again making me pine away for an interior.

Smart modeling vets will know not to add those rear view mirrors until last since they can break off easily (like mine did, several times).

The rest of the hull detail went together quickly. The stowage basket on the right rear side is real neat, but will be hidden if using the huge side skirts on an up-armored vehicle.

Trouble in the turret

The turret is constructed in steps 11-14 and here is where my troubles began. I started by adding the gun pivot and the turret halves. This leaves a seam in the front and didn't look right. After looking at my limited Warrior references I discovered that the front of the turret is actually a single armored casting attached to the slab-sided turret weldment. Furthermore, part B-3 is part of the casting, forming a frontal bullet splash guard probably intended to protect the turret race. In addition, the joint where this gap appeared is squared off on the model and is actually rounded on the 1/1 scale vehicle. The whole thing is also textured from the casting process. Yikes! Solutions were required.

I applied A/B putty to the gap and a fillet joint was sculpted between the turret and piece B-3. A/B is an epoxy putty that can be smoothed with a wet brush. The square gap was curved to give it that rounded, cast appearance. To texture the area, I brushed on liquid cement on the casting and gun shield then stippled the surface with a wire brush. You don't want to go too heavy on this, the Warrior isn't a T-34 and the casting effect should be subtle.

There are a few knock-out marks to deal with in this area. The periscopes that go around the top of the turret have one each, right in the middle of the glass portion of the vision blocks. Ouch! The normal method of sanding these out was ineffective, so I ended up filling each depression with super glue until they leveled off. The hatches on the roof can be left open or closed, but the interior sides also have some minor knock-out marks.

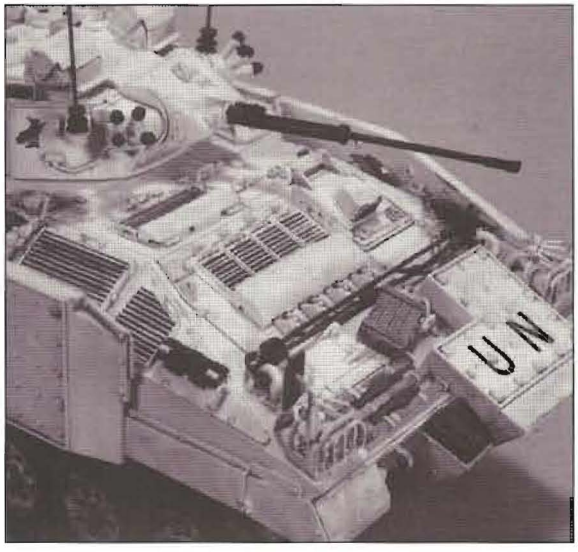
The smoke discharger units assemble easily, but you should add the prominent conduits on the turret sides (the box art makes a smashing reference). I added these using .040" square plastic stock cut 3mm in length. When these were positioned, I added more Hudson & Allen detail solder. This solder is much better to use than brass or copper wire, it is softer and more easily manipulated. Good stuff.

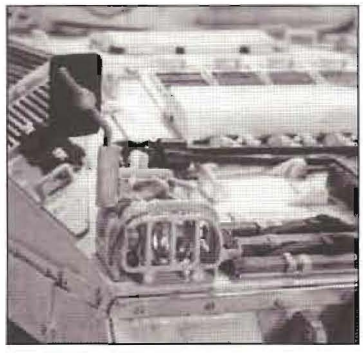
"A tisket, a tasket, oh that turret basket"

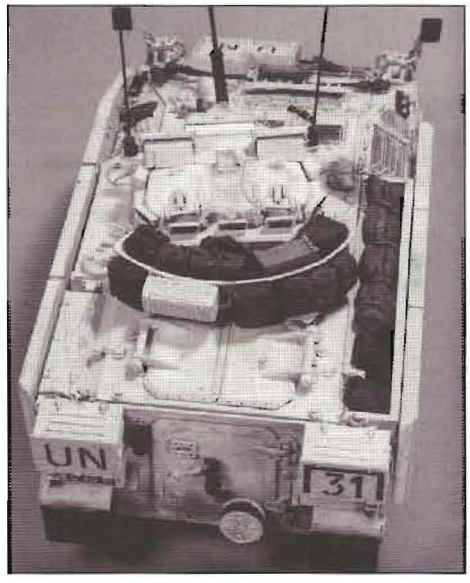
I assembled the rear basket and mesh and was reveling in my high self esteem at a job well done. After super gluing the basket in to the notches on the turret sides (B-34), I noticed that the basket rides about 3mm higher that the top of the turret and interferes with the line of sight for the periscopes. This is the correct placement as far as the kit is concerned, but is no good for the 1/1 scale Warrior. On the real thing the basket is even to the rear of the turret.

I carefully removed the whole basket and carved it out so I could mount the basket at the proper height, which I did... bad move. If you do this the basket hits the tops of the periscopes coming out of the hull troop compartment and the top of the rear ventilator... serious bummer.

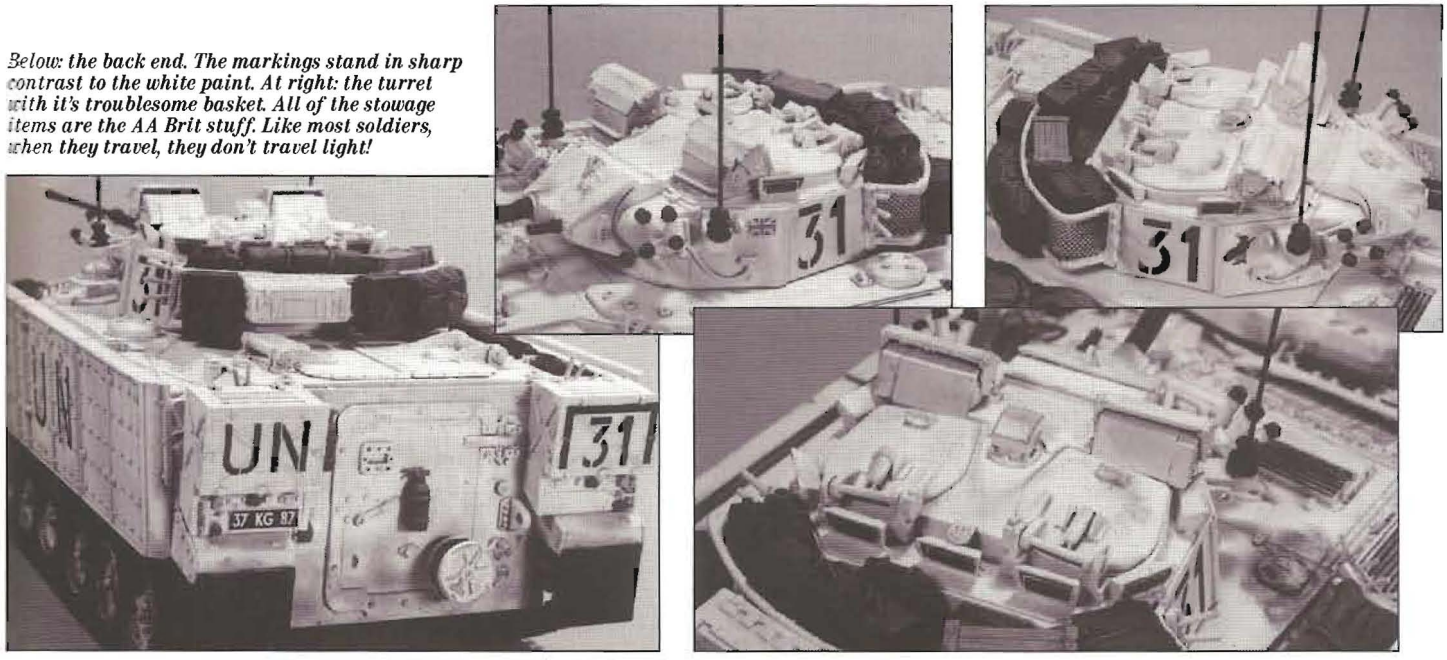
The trouble is that the basket is incorrect in both size and shape. The support arms are too thick and should gently slope straight back rather than







Left: the front end. With all the stowage and other add-ons it all ends up looking very busy. Above: there's an MV lens in there somewhere! Right: overall view from above. Note the long tarp in the right hand side armor bay.



Below: the back end. The markings stand in sharp contrast to the white paint. At right: the turret with it's troublesome basket. All of the stowage items are the AA Brit stuff. Like most soldiers, when they travel, they don't travel light!

jutting out at a 45 degree angle where the basket meets the turret. Also piece A-26, the pinheads, are actually located on the basket rather than at the end.

Since I did such fine job fixing it the first time, this basket was not going to be undone without employing a heavy blunt object. I opted to sand the hull periscopes lower, even then I could not put the turret on straight and had to mount it at an angle where that basket won't hit anything. You can't win 'em all!

The puzzling aspect of this whole basket fiasco is that both the box art and the included line drawings show the proper basket size and the right position for the pinheads. I assume some after market company will ride in on a white horse to provide us a new basket, but until then, the line drawings in the instruction book look like our only help to scratch-build a new one.

Add That Armor

Steps 15 and 16 deal with the adding of the huge chunks of Chobham armor that are mounted on modern Warriors. It is great looking stuff with big bolt heads to drybrush. Unfortunately, there are also problems here. The armor for the hull front is somewhat oversized and simplified. The real one is a two-piece job consisting of the armor and an attached sheet metal bin. A piece of angle iron is bolted to the right front of the armor and this serves as a reinforcement for a towing pintle. While the box art does not show this detail, there are many pictures of it in other references. The mounting points for the skirts are also very simply designed.

Painting the Warrior

I knew from the start that I wanted to do a British Warrior as seen so often on CNN in "shoot me" white, with United Nations markings. I sprayed the model with White spray primer from the Armory. It looked so good that I decided that this would be just as good a base coat as my original choice of Tamiya gloss white. The vehicle was washed selectively with Windsor-Newton oils, (Yellow Ochre with some Raw Umber), I say selectively because these are tough vehicles to paint.

The Warrior and other United Nations vehicles on peace keeping duty around the globe are painted white, real white, not white wash for winter, but honest to goodness pure-as-the-driven-snow WHITE. I have some pictures of Warriors in a rail yard preparing for duty and they are spotless white. Even field vehicles show no paint chipping, they are just white, white, white. The modeler is in a bind here, how does one drybrush a bright white vehicle?

The answer was to make it selectively dingy around the details where mud and dust would collect. I washed heavily in the suspension and along the skirts and then some of the turret details. I drybrushed these areas with some light earth tones and picked out the periscopes and other details at the same time. I use mainly Humbrol enamels.

I don't want to sound too critical here folks, but the decals set me into seizures. They don't come off the paper easily and are so delicate that they tear. I wanted to trim the big U.N. markings as close to the bone as possible and they just fell apart on me. Without trimming, you are going to need vats of setting solution to get these bad doggies down. They fought me tooth and nail. I believe that the large U.N. decals are part of the Tamiya modern decal sheet. There is also a U.N. brass stencil in the Stencilit range.

I stowed out the Warrior with a wide variety of gear, as they do in field operations. Photographs of British Warriors in Desert Storm show the vehicles just loaded with gear, Bosnian ones are a bit more spartan. The stowage came from the good folks at Accurate Armour. They make a wide variety of add-on goodies for their modern British vehicle range. The stowage is a nice way to break up the monotony of the white vehicle. One note about stowage. The British do not simply use the same stuff as the American military. Everything has its own distinct British style. Don't just throw anything you have sitting in your parts box on and assume it belongs there. Check your references.

Conclusion

This kit fills an important gap for modern armor modelers. It will go well with either of Tamiya's modern British Challengers or their Chieftain MBT. AFV Club's Scimitar would be a perfect addition to this vehicle, since both served together in Bosnia and Desert Storm. Figures to fill up your Warrior are available from Verlinden and Warriors, as well as Accurate Armor. As for the troops that ride in this baby, DML's Desert Rats are perfect. Since the Warrior has other vehicles based on it, it will be interesting what the after market guys come out with, too.

It is very important for the modeler to know clearly what he wishes to do with this kit before starting. If you are not particularly picky (a state of mind I abandoned years ago), the model will give you a fair representation of the Warrior straight out of the box. If you are a purist you will have to give this baby some lovin.' The easy way out would be to do a BAOR vehicle and forgo the add-on armor, but that turret basket will still need fixing. It is very easy to get hypercritical of any model these days since the kits we are getting are so accurate and well done that any error sticks out like a sore thumb. You really can't be unhappy with the price and most importantly it is a 1/35 scale British Warrior!

Up until now, the only way to get this baby in your hands was by purchasing the resin kit from Accurate Armor. While the Accurate Armor kit is excellent, the resin world scares off many modelers and it is just plain nice to have a plastic alternative available. So I heartily welcome the Academy/Minicraft Warrior to the family, warts and all.

—Nick Vanston

MMiR RECCE

Academy/Minicraft Warrior MCV. Kit number 1365. Suggested retail price $32.00

Accurate Armour accessories: A06, Modern British jerry cans; A15, NATO 7.62 Ammunition boxes; and A26- 30mm Rarden Ammunition boxes and cans. Items graciously provided by the manufacturer.

References:

Osprey Military New Vanguard #10 Warrior MCV 1987-1994 by Christopher Foss and Peter Sarson. One of the better in the series. Great color plates and the whole story of the Warrior.

Not easy to find, but many news periodicals (TIME, Newsweek, etc.) have had shots of Warriors in

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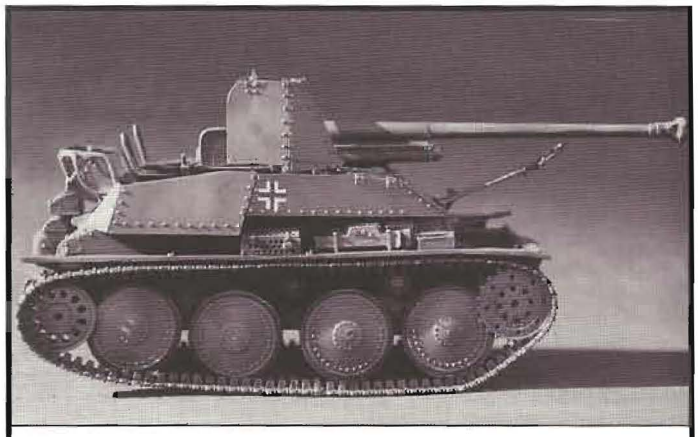

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My Gal Matilda

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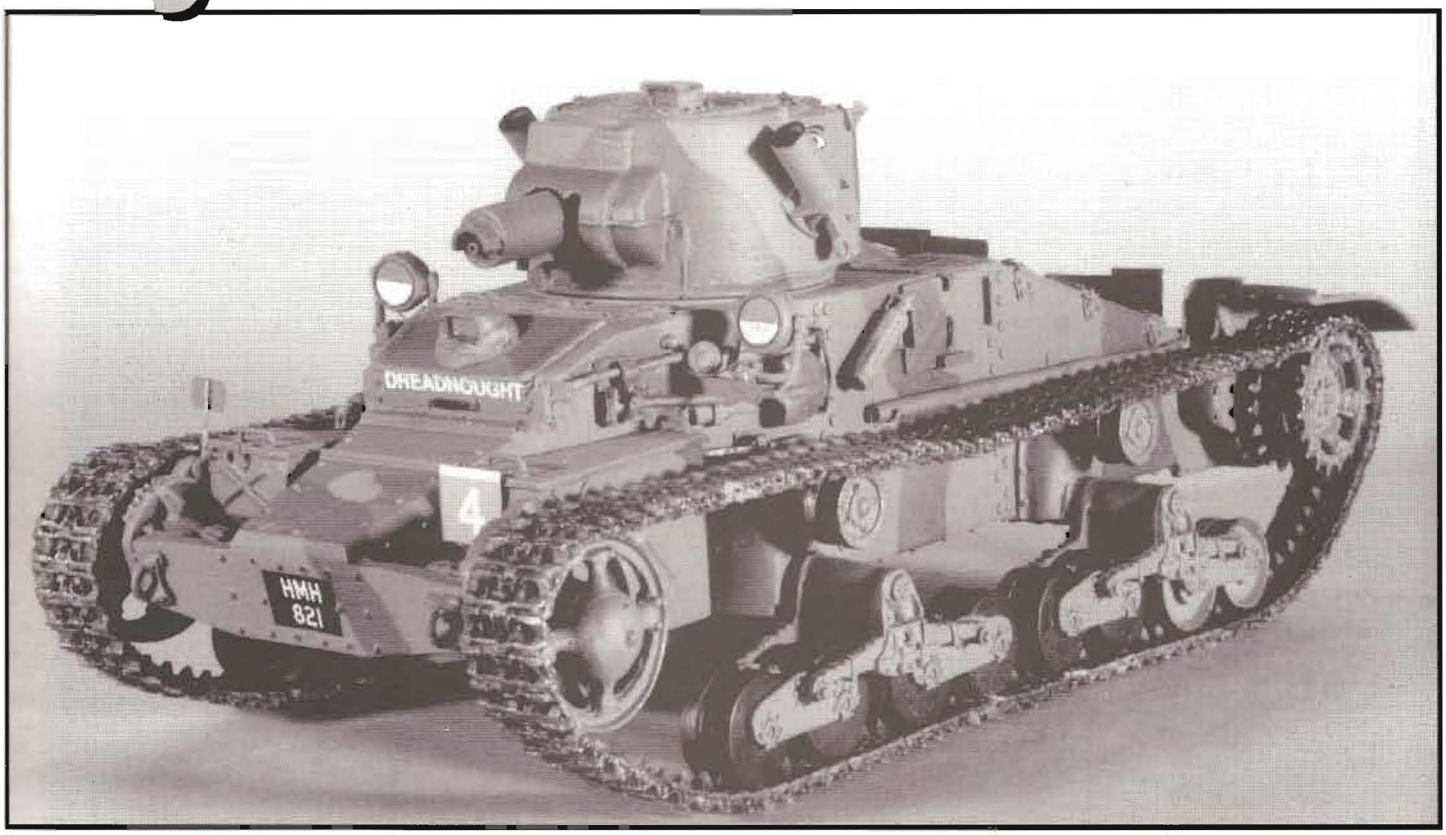


Economy was the watchword during the period between the wars in Britain, and economy was the parent of this little machine gun armed tank. (Notice it has only one parent.) Designated Infantry Tank Mark I (A11), Vickers was given the job of designing and producing the vehicle. It was powered by the flat-head Ford V-8 of 70 hp, giving it a speed of 8 mph. This was expected to be sufficient for its task of accompanying the foot sloggers. The armament was (commonly) the .303 Vickers; a few got the .5 Vickers. The armor (armour?) was sufficient to shrug off the 37mm German Pak 35; Matildas could run over the gun if it was not self propelled. If the gun was mounted in a tank though, the British AFV was quite helpless. This led to the recognition of the relative worthlessness of the whole concept, and the mark I was replaced by the Matilda II and the Valentine armed with the two-pounder. The only combat action of the mark I was in France in 1940.

Bravo Matilda

This is a typical Accurate Armour offering that is a multi-media kit of resin, white metal and photo etched brass, plus some fine wire and metal rod. The resin casting is absolutely superlative, as good as anything cast in this medium. The brass is in the same class. The white metal is only so-so; it's very rough in spots, so get out the files, all of 'em.

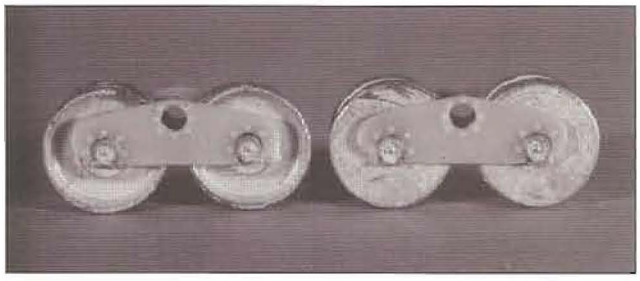
AA has made a quantum leap in their instructions. There are 14 photographs, clear as a bell and printed on good quality glossy paper (I guess they've finally ditched that old worn out copier they used to use for instructions). My primary bitch about these guys was the quality of their plans, and they've fixed it. Bravo!

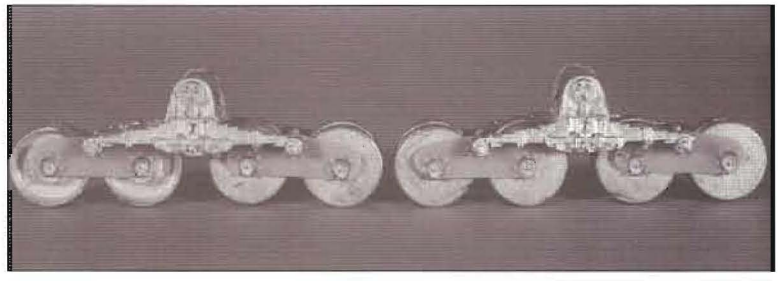
Lets' build the ol' gal

I started as usual with the running gear. I first spent several hours cleaning up all the white metal and accumulated a sizable pile of white metal dust. One idler mount was terrible: the mounting pad had a big lump of white metal on it. By the time I got this cut down (it covered the whole pad), the mount wouldn't sit flat on the resin cross piece. I fixed it with a little tab of sheet styrene.

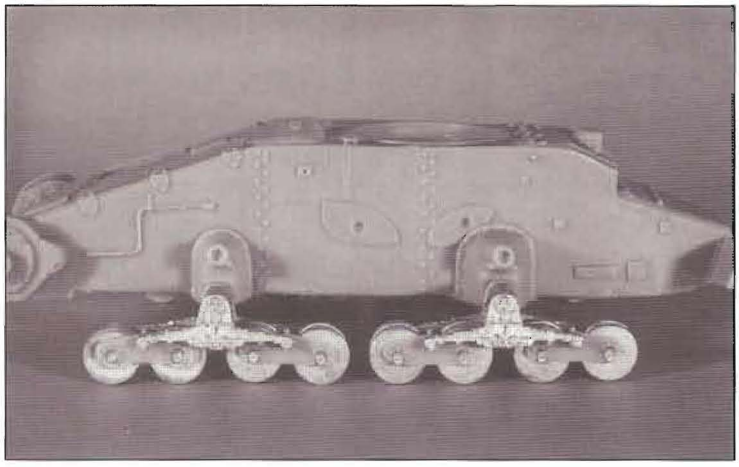
When assembling the bogies, remember that the rearward pair on the rear bogie takes the all steel wheels. The mounting pins were too big for the holes in the mounts, so I drilled them out. Same with the mounting holes for the return rollers. I put all the stuff on the sides (stowage boxes, tools, vent blanking plates and hardware, tow hawser holders, antenna mount and cable clips) before mounting the bogies to give me more working room. I drilled the stowage boxes for the rod handles and fit them before putting the boxes on.

There's a trick to the vent blanking plates. These take a retainer made of the furnished rod which fits into a hole on the hull side. If you glue the plate on first, you'll play hell trying to get that piece of rod in the hole. Insert a short bit of the rod in the hole; you don't have to glue it. Now slide the plate

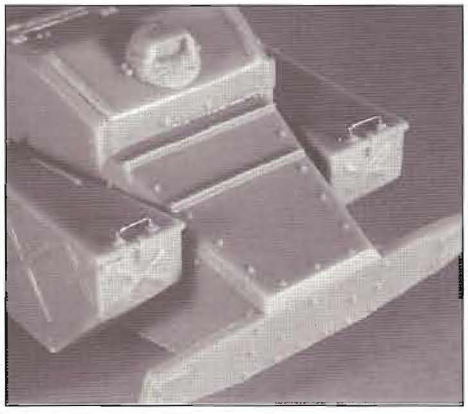


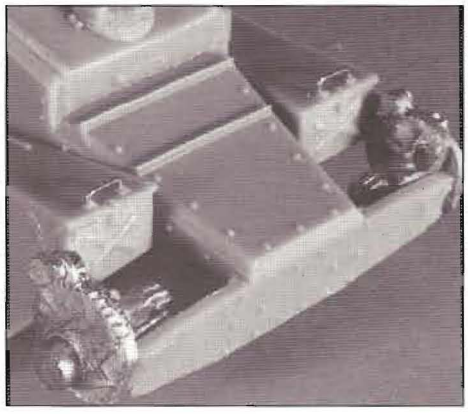


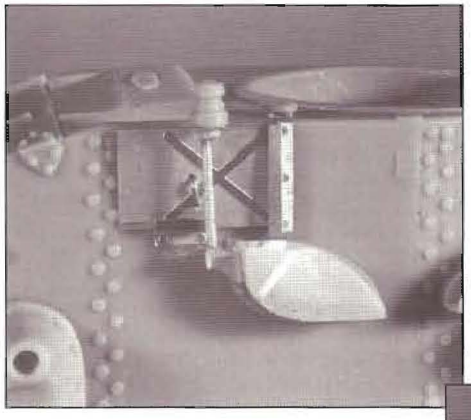
Above left: on the left are the all steel roadwheels that go on the back end of the rearmost bogie; the others are the rubber ones that go on the rest of the stations. Right: sets of bogies assembled and in order as they go on the vehicle with the front being at the right.

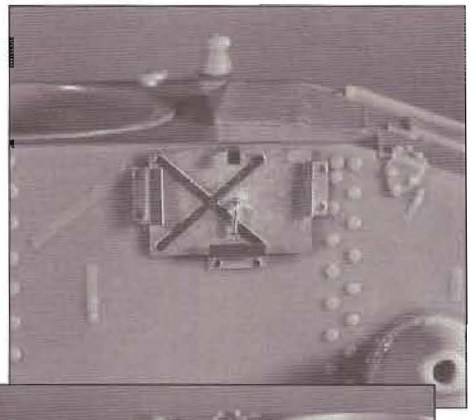


Left: bogies in place on the bare hull. This was a trial fitting; you'll want all the stuff on the hull sides before you glue these on. Below left: stowage boxes and driver's hatch in place. The boxes were drilled for the handles made from the furnished rod; this was done before mounting the boxes. Below right: idler mounts in place.

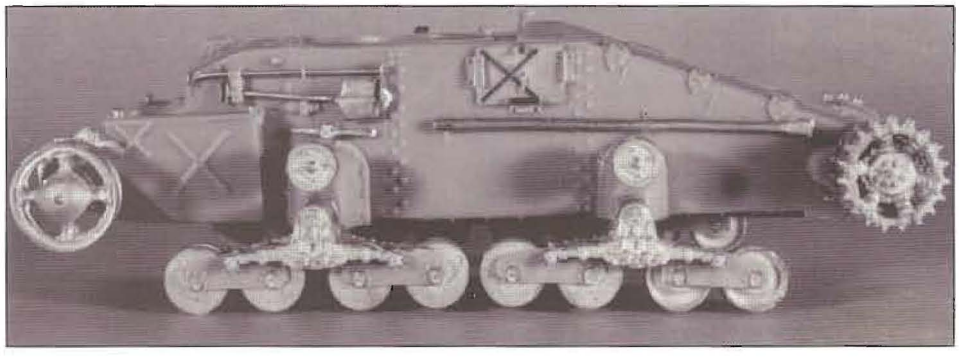








Above left: right side detail parts. The antenna mount still has to be wired. Note the repair on the rear hawser holder. My Dremel ran amuck while I was removing the part, and I fixed it with styrene. Above right: left side blanking plate with retainer in place. Right: tool stowage in place on the left side. Note pickax head above the suspension mount. Below: left side with all suspension parts in place.



over the rod and glue in place. The rod locates the hole in the hull with the hole in the plate. When the plate is dry, remove the rod, bend the end to make the retainer, and reinsert this time with glue.

Notice I didn't put the lights on at this stage. The mounts are fragile with little glue area, so I wanted all the bogie rassling done before I added them.

Onto the idlers and drive sprockets. The latter are made up of four pieces, the inner and outer sprocket and two guide rings on the inside. Make sure the guide teeth on the tracks will fit between the guide rings. Now these parts, the return rollers and the bogies can go on.

Time for the lights. Bend and attach the mounts; the one on the left slides under the tools and is a tight fit, so it is no problem. The one on the right just kind of hangs in space, and I could see it flying off while I was drybrushing. To avoid that (I'm doing this to relax, not have a stroke) I put a tiny wedge of styrene on the mount to at least give a little added glue surface. Now assemble the lights to their brackets. Put the wire needed on before you put the lights on the mounts, then trim the wire to fit. Don't forget the horn on the left side. Wire also goes on the antenna mount.

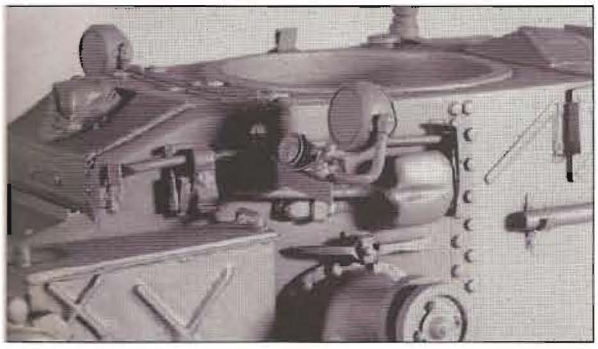
I tried to put on the middle and side deck plates separately (E12 and E13s), but it was no go. I laid all three out on my workbench, making sure the rivets were facing the right way, and glued them together. Then they went on the deck OK, but the brass is very light gauge and flexible, so keep your big mitts away from 'em after they're on.

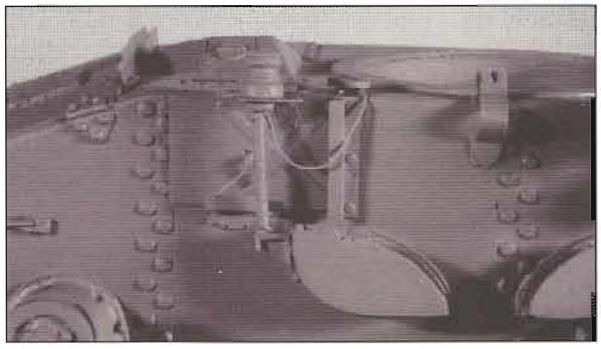
The engine deck screens are next. The long ones drop right into place, but the forward ones need to be shaped to match the curve of the deck on the rear outside corners. I glued the other three corners down, let them dry, and then pushed them down and glued the last one. Here the light gauge of the brass helps you, as the screens conform quite easily.

I then added the jack, jack block and tow shackles to the rear of the hull, the drivers hatch to the front, and gave that baby a coat of paint. The closest I could come to the light green color was (with my regular Pactra acrylics) interior green, darkened just a touch with dark green. The stripes are done with jungle green. I had to go back and paint the sprockets, idlers, return rollers and the last pair of roadwheels with gunmetal and the forward roadwheels with black.

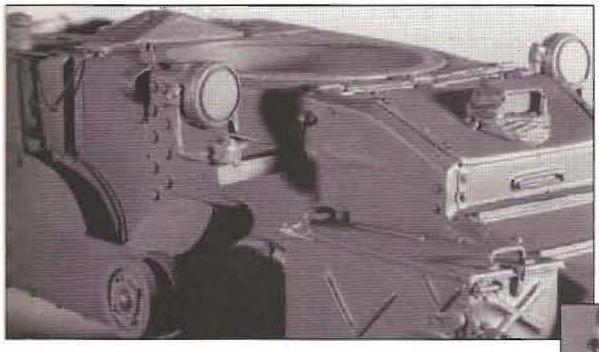
Sometime in the process, I took a break and built the turret. There's not much to it. If you want to show the hatch open, you'll have to cut it in half. Otherwise, put on the hatch and the gun barrel. All my references showed a gun muzzle, so I made one out of a round bit of plastic drilled out. The plans say to modify the smoke discharger brackets, but they don't say how. They looked OK to me, so I used them as is. The "u" shaped mounts need a little opening up to accept the breech of the discharger. I put the hatch stops on each side of the turret. That's it, unless you want to wire the dischargers. All the fittings are cast on the turret for the wire.

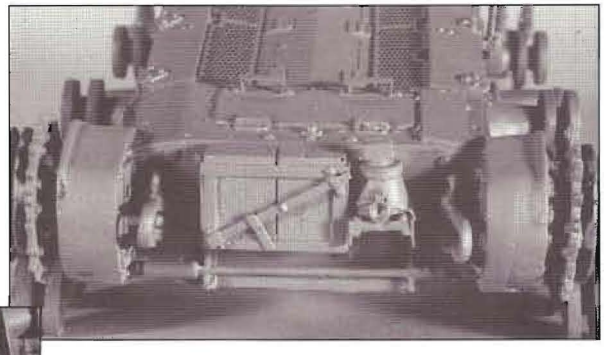
The tracks are typical Accurate Armour fare. They are easy to work and need only a little cleanup. I built three long sections using a track jig to keep 'em straight. I put this on the top run with glue on one of the return rollers. Using a hair dryer, I gave the tracks a little bit of sag to the next roller and glued. I did the same to the idler and drive sprocket. You may need to open up the holes in the track a little to get the sprocket teeth in. Then it's just heat and bend around to the bogies. It should take you six or eight shoes to close the gap on the bottom. Of course, the tracks need to be painted

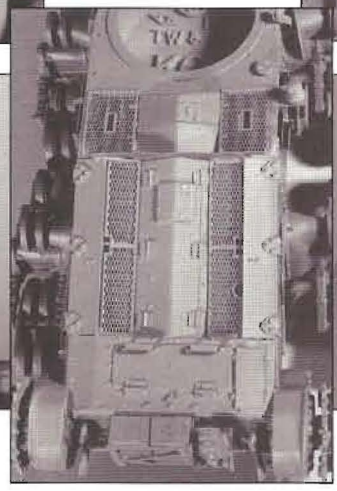


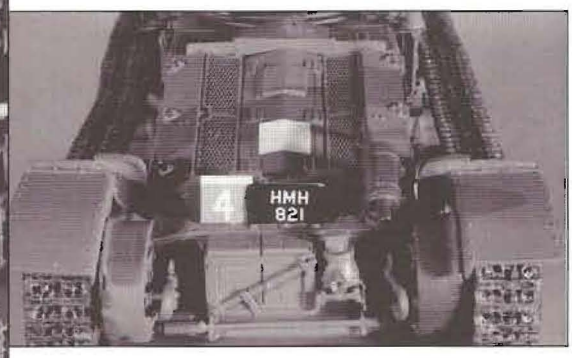


Above left: light mount in place on left side. Above right: right side with the first coat of paint; note wire on antenna mount. I never found a photo of an antenna in place, so I didn't put one on. Middle left: right side light mount. I beefed this up with a wedge of styrene on the underside, where it's invisible. Middle right: the rear, showing jack block, jack, and tow shackles. Below left: smoke discharger on turret; yes, I should've added the wire to actuate them. Below right: high angle rear view, showing exhaust system.









Engine deck screens in place, along with the transverse hull plates.

Turret detail; the gun muzzle, so apparent in photos, was not included.

first. I sprayed them with rust, and then gave them a heavy black wash. After they were on, I dry-brushed with gunmetal.

I put it on the exhaust system, which I'd already painted in rust. I finished all the other detail painting now too. The periscopes are done in military blue, with a gloss overcoat. Black went on the vision slot (yep, there's only one), the gun muzzle and exhaust pipe. The canvas around the drivers periscope is dark gray. I mixed the blobs of anti-gas paint (it was supposed to turn color in the presence of various WWI type gases) from insignia yellow and interior green. The headlights received a half moon of white with a gloss overcoat, just like the box art. I did very little drybrushing on this kit for fear I'd knock a bunch of stuff off.

Last were the decals. Yes, AA provides a complete set of water slide markings for this baby. Take care because they are very thin, but once on they are fully opaque. The sheet provides markings for five tanks of 4th Royal Tank Regiment. I used "Dreadnought" mainly because the length made it easier to handle. I'd painted the arm of service plates and the number plates and set them aside to decal before mounting. You'll never get the stuff on if you put the plates on first, and the decals need just a little bit of trimming after they're dry. I didn't put a white recognition square on the left side, as there seemed to be no place for it. Same with the "T" numbers. No reference picture is marked (or not marked) the same way. All the decals conformed beautifully with Micro-set. After drying and trimming, I put the plates on and then sprayed all the markings with clear flat. It's finished!

I think I've taken a shine to the lassy

A great wee model, indeed, as the front of the plans say.

Nothing here is extremely difficult, but the assembly will take a good bit of time (a month of weekends, four to six hours a day). The result is pleasing though, and for those interested in the early days of the War, it's a must!

—Joe Morgan

MMiR RECCE

Accurate Armor Matilda I. Kit number K67. Kit graciously provided by the manufacturer. Retail price approximately £55.50 in the UK and a bit higher in the U.S. dollars.

References

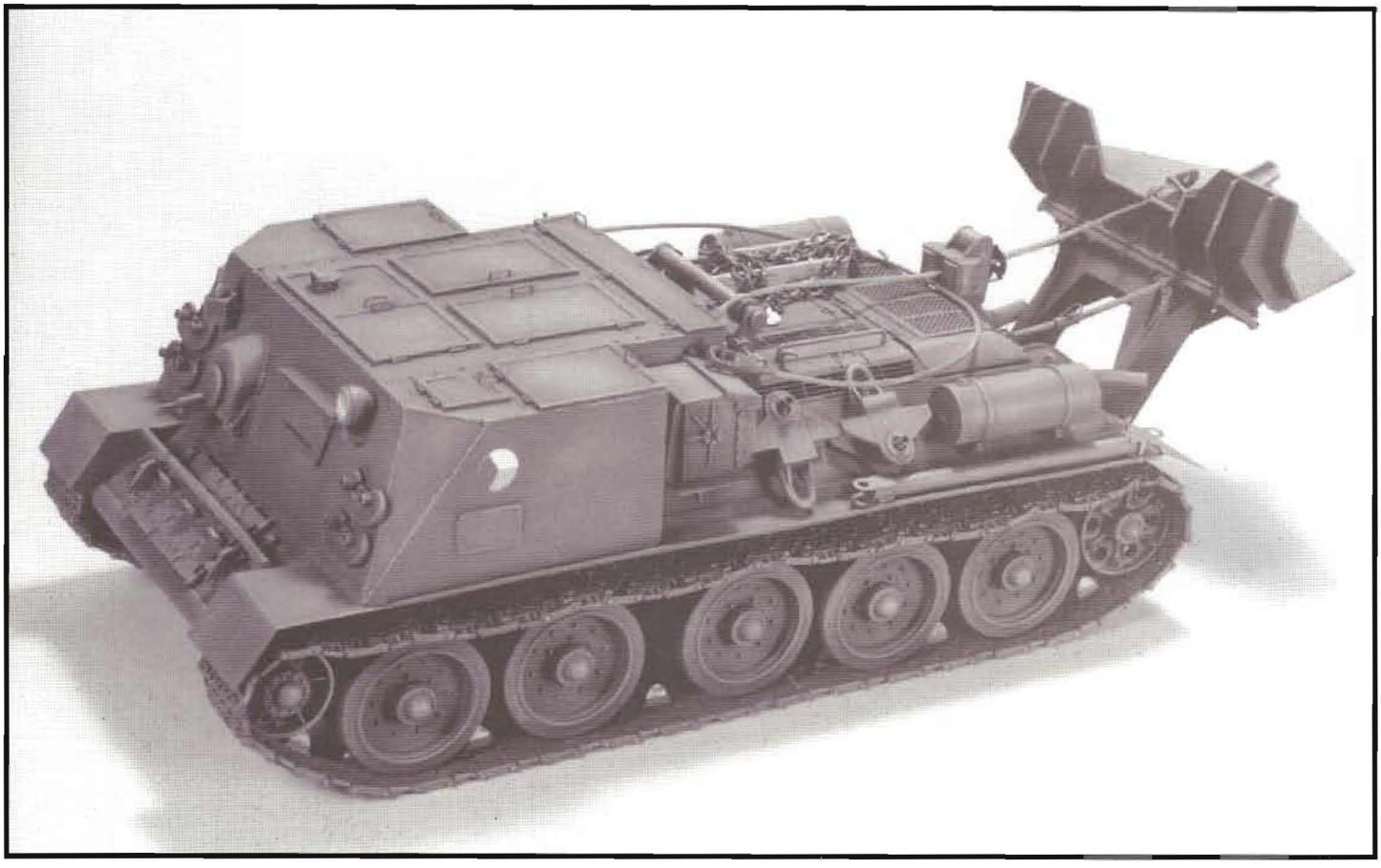
British and American Tanks of World War II, by Peter Chamberlain and Chris Ellis, ARCO, New York, 1981. Good general reference.

The Vickers Tanks, by Christopher Foss and Peter McKenzie, Patrick Stephens Publishing, Wellingborough, England, 1988. A little more specific.

Tanks of World War Two, by Jean Restayn, Histoire & Collections, Poole, England, 1995. Excellent color plates of the Matilda I. I dare say one of the few places you'll find them.

Tee With A Vee

The Aires VT-34 conversion set: new life for that old Tamiya kit



The VT-34 Armored Recovery Vehicle consists of a turretless T-34 tank chassis modified by the addition of an armored superstructure and equipped with a spade and winch assembly. The winch takes up nearly the entire inner compartment of the vehicle leaving room only for a crew and two.

The VT-34 was once thought to be a late war addition to the Soviet livery, but its development was more likely inspired by the wartime need for such a vehicle. "Defanged" SU-85s and SU-100s were used as towing/recovery vehicles by the Russians during the war, but there appears to be no evidence (that I could find) that the VT-34 was used in combat. Most, if not all of the reference shows post war T-34s converted. Starfish type roadwheels and scalloped exhaust housings are evident on many of the photographed vehicles. However, some early features were seen, which makes this conversion a little bit easier.

VT in a box

Aires Hobby Models has produced a mixed media conversion for the venerable old Tamiya T-34 kit. The Aires set consists of some 33 resin pieces with a large sheet of photo-etched brass, brass rods and a well illustrated nine step instruction sheet. Aires is made-up of former members of the Eduard photo-etched brass team and all the sets offered include large sheets of brass (makes sense). The line is represented in North America by Eduard.

The set will work with any of the Tamiya kits, even the SUs. Using an SU kit will not leave an "orphaned" turret, but will mean more radical surgery to the hull. I'm not sure if the Aires set works with the Italeri/Zvesda kit, so some measuring might be in order to ensure the two are compatible.

The resin parts in my kit were very crisp, cleanly cast and well detailed. There were no indications of air bubbles and little or no clean-up was required. The large superstructure piece is hollow cast, but all the hatches are molded shut. Like items produced by Eduard, the photo-etched brass sheet is superb.

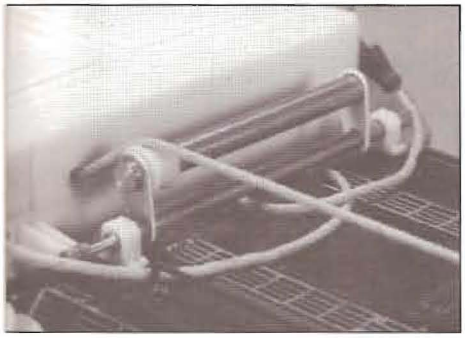
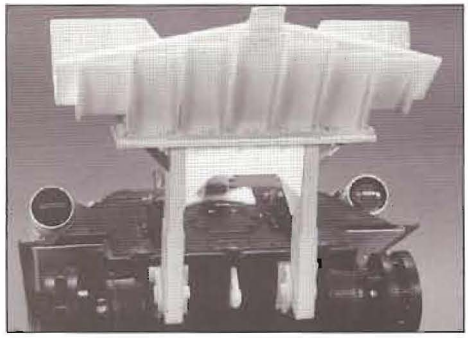
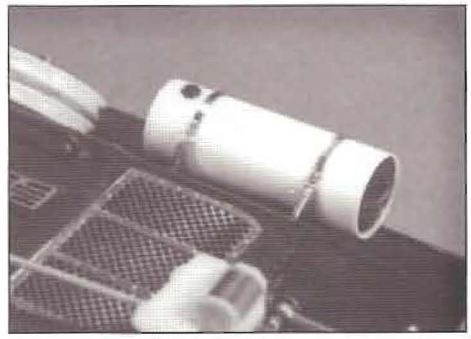
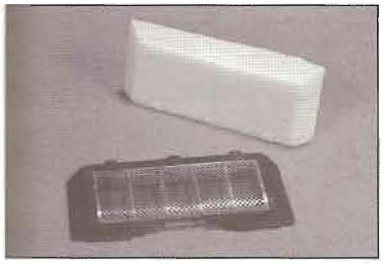
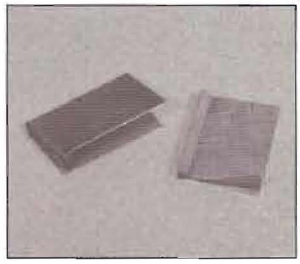
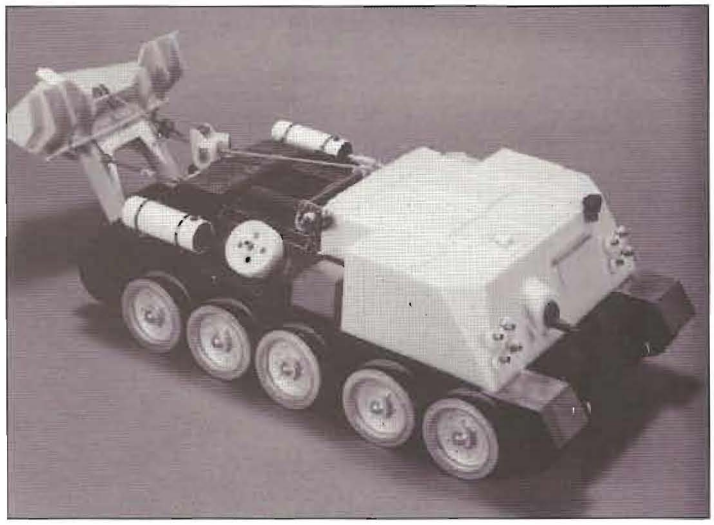
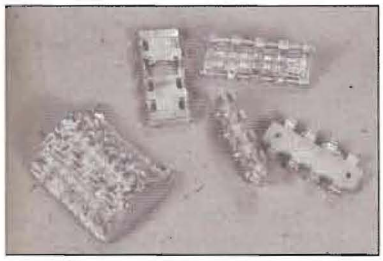
As usual I started assembly with the lower hull. Nothing new here. The Tamiya lower hull assembles with no problems. The Tamiya kit is an older one, and suffers from that common vintage kit malady, motorization holes. I filled this in with styrene pieces and putty. While I was there, I added long sheets of styrene to either side of the lower hull to close off the sponsons.

Just in case you don't know this, do not mount the towing lugs (A-14) to the front of the T-34 as the instructions state. These are bogus. They are present on the T-34 at the tank museum in Aberdeen, Maryland. But these were added there to make the vehicle easier to move around. No Honest-To-God T-34ski ever wore them.

Depending on which Tamiya kit you choose, you will probably end up with early pattern wartime roadwheels. As I mentioned at the top, all my references show the late solid pattern wheels, the starfish, or the spoke type. I happen to have a set of the late style rubber tire solid wheels by MB Models. Chesapeake Models makes an excellent set of the starfish type and I believe Warriors also offer the solid type (again in resin) with their OT-34 conversion.

Mounting the MB wheels was no challenge. The only modification required was slightly trimming the suspension arms to fit the new wheel hub. I used slow setting superglue to give me a longer working time. I installed the roadwheels by working on only one side at a time. I attached each full set with the wheels resting on a piece of Plastruct angle. This ensures that all the centers line up. Another piece placed along the outside length ensures that the this edge is straight and true (like me). With all of this done the model was left overnight for the glue to completely set.

To improve on the Tamiya vinyl tracks (which are pretty bad), I used replacement white metal tracks from Friulmodellismo. These tracks capture the look and feel of the T-34s tracks faithfully, especially their characteristic sag. The tracks for the T-34 are composed of two flat plates alternating

Top left: the brass winch roller. It should slant towards the rear. Top middle: The beautifully molded spade and its hull attachment points. Top right: the detailed fuel drums. Above left: the resin deck piece and the modified kit part. Above: the brass replacement fender and the kit part. Left: the Friul track links and their jig. Right: the model prior to painting.

throughout the run, so there is no illusion that they bend. The Friul tracks are of the late type pattern and I really enjoyed working with them. They assemble in a small jig (provided) using integral tabs in each link that bend to lock into the next links molded-in pin. The result is a link-to-link workable track with no clean-up required. Anybody frustrated with the tediousness and cleaning of plastic tracks should try these. They are fun!

I formed the tracks in one continuous section, using the kits track as a gauge for length. I test fit the track until I got the desired look. They were then removed for painting and reinstalled closing the last link on the bottom run. A small drop of superglue between the track and wheels is all that is required to keep the track together.

Upper hull

Hull assembly consists mainly of attaching the resin superstructure to the stock Tamiya upper hull. The only modification involves cutting off the hull's machine gun for the large piece to fit.

Some sanding and test fitting of the superstructure to the upper hull are required to assure the right fit. Beveling the inside of the parts wall allows it to fit tight against the upper hulls angular shapes. I used my Dremel tool to do this. The correct fit should have the superstructure fitting flush against the hull sides. Also, a weld bead should be added along the edges where the superstructure meets the glacis plate and hull.

The Aires kit supplies excellent photo-etched replacement fenders. The kits front fenders should be cut flush with the hull sides to accommodate them correctly. These items are a definite improvement over the thick plastic ones in the kit and a quick way to immediately add extra impact to the model.

Moving to the back of the hull, they also supply a complete set of photo-etched grilles for both the large engine access hatch and the side grilles. Oddly the Aires kit supplies a solid resin replacement part for the engine access hatch along with the photo-etched parts. This didn't make sense to me because the great part about the brass parts is that they allow you to see down into the engine area. I opted to use the Tamiya part (A-11), cutting off the molded-on screen, modifying it to match the brass, and then attaching the parts. Lacking an engine detailing set for this kit, I added rear engine louvers made from plastic strip to help camouflage the big open area underneath. The engine deck openings of the T-34 series are fairly large, offering good views of the engine compartment. Consider adding either the Verlinden or Commanders engine detail set. The VP one is less elaborate and may be the ticket if you're not going to show the back end peeled open.

Brass details are provided for the Tamiya fuel drums. But rather than waste a lot of time carving up the kit parts, I simply replaced them with 10mm styrene tubing. This is the same diameter as the tanks, so the end plugs can still be used. I carefully shaved off the filler caps from the kit parts and added the Aires brass lift lifting handles. Mounting straps and brackets are also provided in brass.

The winch roller assembly proved fun to build. However, the instructions get a little sketchy here. The assembly consists of two sets of brass rods which are supported by a pair of photo-etched brackets. My references indicated that the assembly should sit at a slight angle. The winch cable is string provided in the kit, but the tow cable seen in the photos is from the H&A range.

The Ace of Spades

Probably the most prominent feature of the VT-34 is the large spade mounted on the rear of the vehicle. This spade is very similar to the one found on the German Bergepanther.

The spade assembly is comprised of two resin parts, the spade itself and the supporting arms which are attached to the lower hull at the rear of the vehicle. The spade is beautifully rendered and very fragile. I ended up breaking off the tip of spade which had to be replaced with sheet styrene (damned carpet). I recommend building and installing this assembly last to avoid such trouble.

Other Details

The pipe support rods (again much like the Bergepanther) for the towing clevises and miscellaneous exterior equipment are provided as flat photo-etched pieces. These are meant to be rolled and formed into tube shapes. This was a little too much for me. I simply used brass tubing. Thinking back on this, I should have used styrene tubing. This would have allowed me the opportunity to drill through them and replicate the retaining clips.

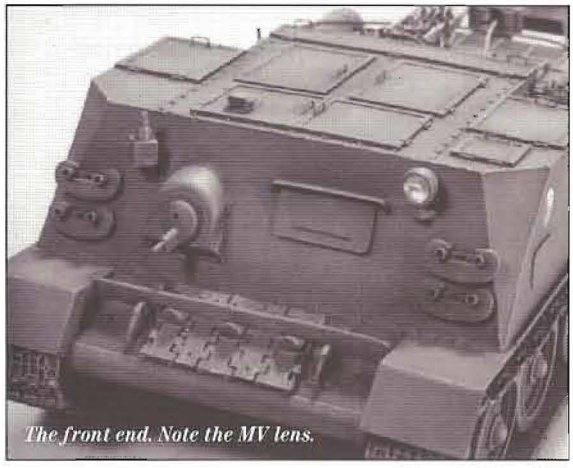
I did add exhaust pipe extensions from plastic tubing. Most of my references showed these. I assume they were installed to help the exhausts clear the spade. These are very crude looking, possibly even field applied, with obvious weld joints.

Finishing touches

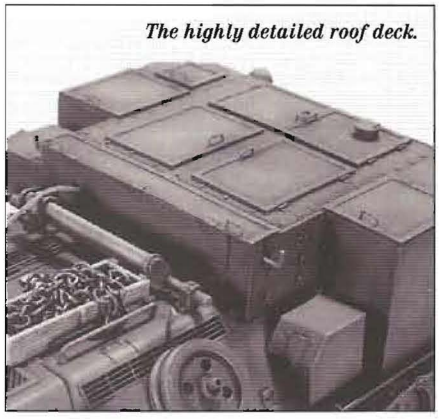
The kit does not provide decals. All of the vehicles observed in my references, except the vehicle from the Budge collection, were without any numbering or markings. The Budge VT-34 did have a Czech roundel, which I thought would add a nice touch of color.

I gave my model a coat of Floquil Pullman Green followed by an over spray of the base color lightened up with a bit of yellow. For weathering, I sprayed the model with Testors Dullcote and used washes of black and burnt unber artists oils. I drybrushed with lighter shades of the base paint. To replicate worn spots on the spade, I drybrushed it heavily with gun metal and dark brown.

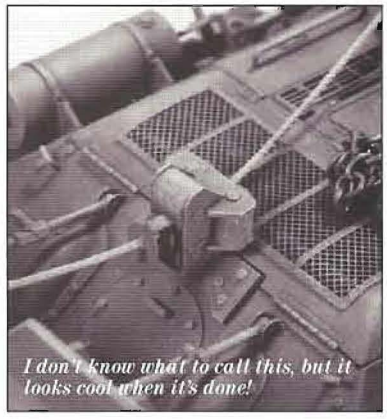
The tracks were painted with Floquil Rail Brown and also washed with black artist's oils. The



The front end. Note the MV lens.

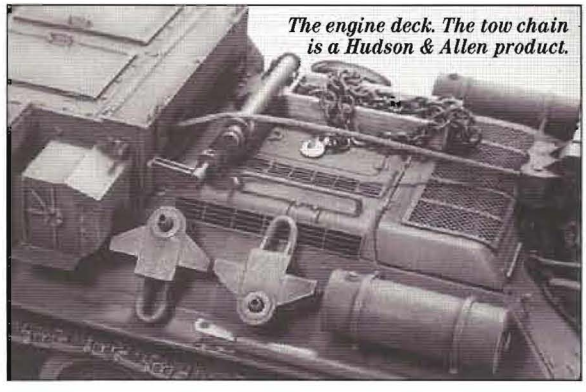


The highly detailed roof deck.

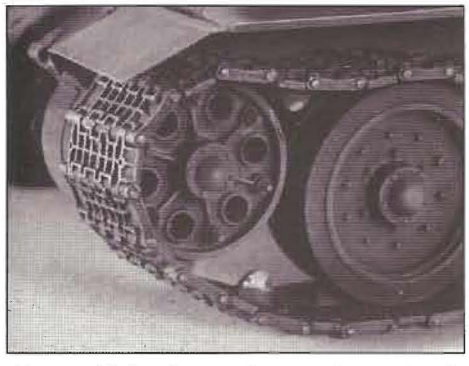


I don't know what to call this, but it looks cool when it's done!

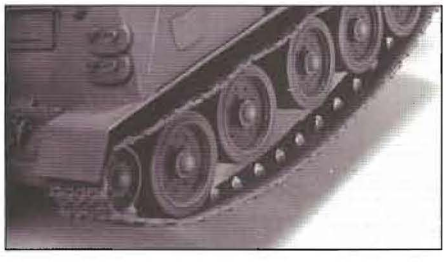
Here and right: the finished spade assembly.



The engine deck. The tow chain is a Hudson & Allen product.



Above and below: two great reasons to go out and buy the Friul tracks!



Above: the Budge vehicle. The large shot shows the winch motor housing and all the towing equipment. Inset: the spade. Note the tip. Look for more photos of this vehicle in the next issue of MMiR.

worn metal look on the tracks and guide teeth was accomplished by lightly scraping and sanding the paint off to reveal the white metal material of the track. Another big plus of the Friul line, nothing looks more like metal than metal!

This is an interesting and enjoyable model which fills a niche of an otherwise neglected subject. Fans of engineer and recovery vehicles will especially appreciate it.

This is the first in what will become and extensive series of kits and conversions from Aires. Highly recommended!

—José Ramos

MMiR RECCE

Aires VT-34 Conversion Set. Kit Number 3001. Kit graciously provided by Eduard Model Accessories. Suggested retail price $44.95.

References

AFV News, Vol. 19 No. 2 and *Vol. 24, No. 2*. Both contain helpful line drawings and photos of actual vehicles in the field.

Soviet Tanks and Combat Vehicles 1946 to the Present, by Steven J. Zaloga and James Loop. Arms and Armor Press, 1987. Out of print and a bit dated now, but this book is a lot of fun for Soviet vehicle fans. It has a good description of all Soviet modern recovery vehicles including our pal the VT-34. There is also a companion volume that covers Soviet armor from early in the century through WWII. Snatch 'em both if you can find them.

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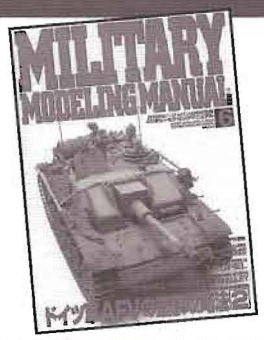

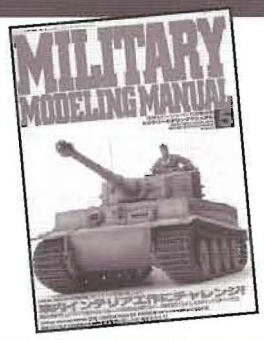

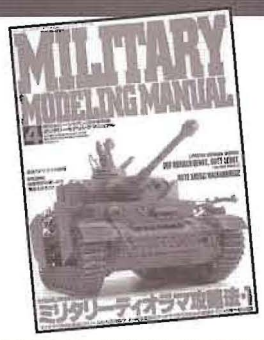

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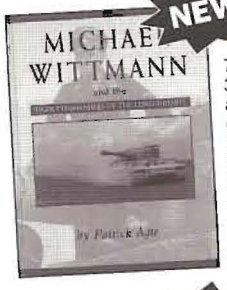

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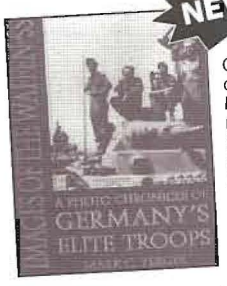

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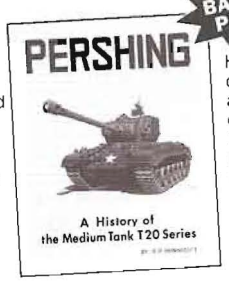

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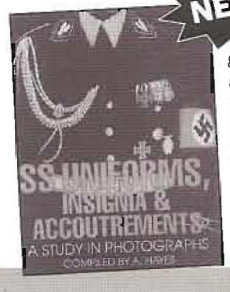

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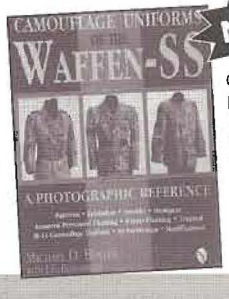

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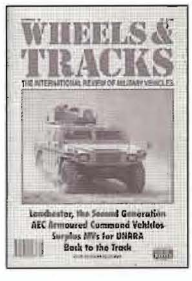

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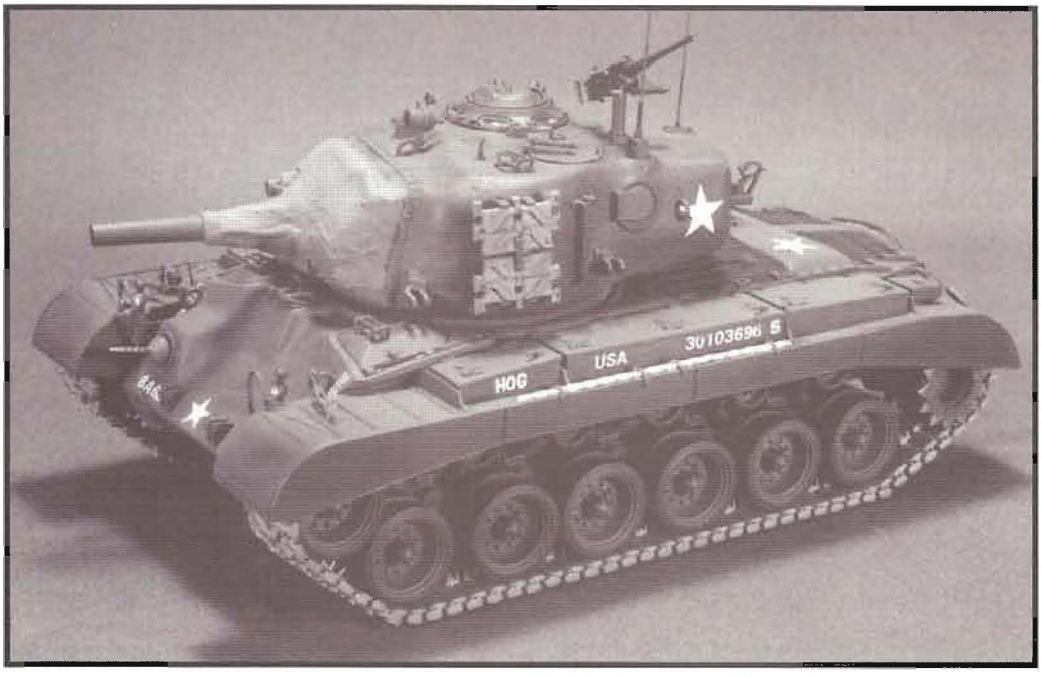


The least known tank from the Korean War might be the M45 support tank, a 105mm armed version of the M26 Pershing. MB Models makes a turret conversion kit and that makes it easy for anyone to build this rare tank from "The Forgotten War."

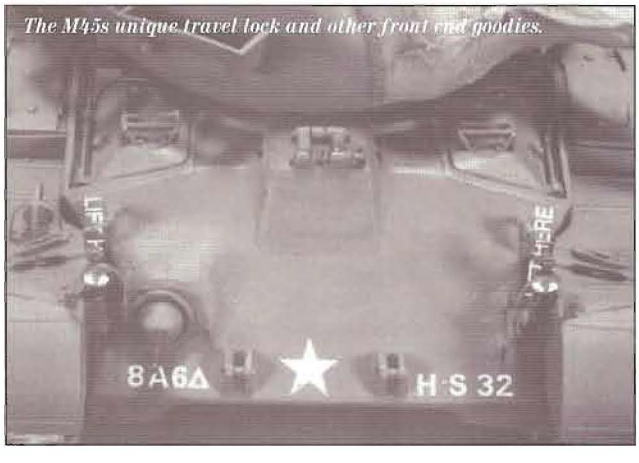
The Forgotten Tank from the Forgotten War.

The M45 was designed and built to replace the 105mm M4A3 in tank units that converted to the M26 and M46 gun tanks. It was never widely used, in part because the idea of an infantry support tank was dying off after WWII. At least one unit is known to have used their M45s in combat. That unit was the 6th Tank Battalion, U.S. Army.

The 6th Tank, commanded by Lt. Col. John Growden, shipped to Korea in August of 1950 with brand new M46 and M45 tanks recently acquired from the Detroit Tank Arsenal. They landed at Pusan where they had no facilities to unload the 93,000 pound tanks. The ship's own booms managed the job with some difficulty and the 6th formed up and proceeded to the west side of the Pusan perimeter where they immediately went into support of the 24th Infantry Division. The 24th was barely hanging onto the perimeter along the Naktong River and the 76 tanks of the 6th Tank were most welcome. The battalion's assistant surgeon reported that the sight of the tanks lumbering up to the line caused members of the 24th Division to run up and cry over the very sight of these much needed reinforcements.

The 6th Tank Battalion had six M45 howitzer tanks all of which were attached to its Headquarters and Supply Company. When the Inchon landings gave rise to the breakout of the Pusan perimeter in mid-September of 1950, the M45s from this company were photographed crossing the Kumho River, a tributary of the Naktong, and became the only documented M45s in Korea. All the photos published of the M45 in Korea were taken on September 18 during this maneuvering as the North Korean lines collapsed. Almost all the photos published show a single tank, H-S 36 a vehicle named HELEN, leading several other M45s across the river at a sandbagged ford. After this brief exposure by the combat press, the M45 then faded into history, nearly forgotten by all.

The M45 began life as the T26E2 version of the Pershing and the first prototype was delivered to Aberdeen Proving Grounds in July of 1945. Named at the factory "Little Peter" because of the look of the short 105mm barrel, series production of the howitzer tank started the same month and the name changed to M45 shortly after the war ended. They were issued to post war tank companies at the rate of two per company and assigned to the tank section of the company headquarters. In tank battalions this meant there were a total of 6 attached to each company.



The M45s unique travel lock and other front end goodies.

The hull is identical to the Pershing from which it derives, and the only external modification of note is a revised travel lock which was installed on top of the ventilator blower bulge right below the gun mantlet. The short 105mm (same gun tube as used on the 105mm M4) did not need to be reversed when traveling as the gun tanks did, hence the forward location of the travel lock. Both basic versions of the Pershing hull were used, the original with extra vision blocks for the drivers, and the later re-manufactured hulls with revised blower bulges. That means you can build an M45 on either of DML's T26/M26A1 hulls. If you want to do tank 36, named HELEN, then the T26 hull is the way to go, but you will want the tracks from the M26A1 kit.

Internal ammo stowage in the M45 was changed to handle 74 rounds of 105mm and the turret was heavily redesigned because of the lighter gun mount. The front and sides were cast much thicker and the mantlet was quite different. The coaxial .30 cal machine gun was located low on the left side of the mantlet making an M45 easy to spot from the front. The massive mantlet had a supplemental bar weight added to the top between the lifting rings, presumably to distribute the loads on the turret bearings more evenly. Some M45s were used to test a rear mounted exhaust silencer (muffler) which required that the tow cable be routed along the side of the hull. These tanks are easy to spot from the front also since the cable is quite visible from that angle. Hunnicutt's book on the Pershing only shows the silencer equipped tanks, but production M45s were made from box stock Pershing hulls, which makes the modeling task much easier.

Peter Putters on Peter

The hull construction was typical of all the DML Pershings, a breeze. This excellent kit has been discussed in detail before so I will concentrate in this review on only the modifications needed for the M45. I built the hull straight from the box but left off the travel lock parts. I sanded off the molded alignment marks for the travel lock on the engine deck and scratch built a new lock from bits of styrene tubing and rod with legs made from styrene sheet bits. This is installed onto the top of the blower bulge when completed. I added a tow cable at the rear, since DML overlooked this item, and made some brass brackets to hold it into place. Once that was done the hull mods were completed.

The MB turret is two large blocks of resin. One for the top with a lower half for the turret race. A third piece makes into

Pretty much the whole story—the turret. Most of the added bits were the stock DML items. I did add a photo-etched ammo rack to the turret MG and also drilled out the vision blocks on the commanders cupola to receive globs of Krystal Klear.

the gun barrel. The turret proper is well engineered with a great look that captures the extra armor of the M45 very well. The cast texture is nice and the turret has some of the casting numbers molded on. I had two reservations, however. First, the gun mantlet cover is included in the turret casting and prevents building the thing any other way. It looks pretty good and captures the flavor of the original very well except at the top of the mantlet. The shapes there do not capture well the bulge caused by the lifting rings and the metal bar welded between the rings. I modified the simulated canvas on the casting with epoxy putty to get the desired profile, but I really wanted to have the mantlet exposed the way the tanks in Korea were photographed. To remove the cover and make a new mantlet would be tedious work so I decided to live with it once the shape change was made at the top.

The second problem is the gun tube. It is too big entirely with an inside diameter that scales out to 128mm, and that error is noticeable. The solution was to chuck it out the window (into the spares box) and install a 105mm barrel from another source. I chose to use a tube from the VLS 105mm conversion for the Sherman tank and this was grafted onto the MB casting after being properly shortened. That solved the problem and provided the correct look to the "Little Peter" that gave the tank its nickname. I finished this modification by using more putty to simulate the part of the mantlet cover that drapes onto the tube which hides the joint of the new tube and the mantlet. While I was at this, I also incorporated a lug made from styrene on the bottom of the mantlet that was used in conjunction with the travel lock. The lug has a hole in it for the lock bolt to pass through and must be placed up under the barrel at the right location.

I then discovered that the underside surfaces of the turret casting hung up on the high bulges on the tank hull. The bustle would catch the center of the engine deck and the front turret cheeks rubbed on the blower bulge. The turret was dragged forcefully into the garage and Dremeled into submission. Brrp, Brrrrrrrp, Brrrrrrrp, and the thing swung 360 degrees without hitting the hull. The amounts I had to remove were small and this gave me a chance to use the Dremel on the seam for the turret sections while I had it out. Ancient Bushido code says never expose your Dremel without using it!

Once the mantlet modifications were done and the gun tube installed, I finished the rest of the turret details. All the bits you see here come from the M26 turret and are just installed as directed by DML for that kit. Wire was used to make the antennea and the grab handles. Easy, easy, easy.

The nearly completed tank then got a coat of Tamiya olive drab (that nifty dark Army shade) and I applied stencil decals from the Master's Hobby Supply sheet for the M4 Sherman to produce the markings on the stowage boxes. The decals worked well and I supplemented them with stars from various Tamiya tank sheets. I decided early on not to do the much photographed HELEN and settled on the "only tank from the 6th Tank Bn. not photographed," which I arbitrarily named HOG using an unused decal from an airplane sheet. In spite of this, the markings you see here are consistent with those used by H&S Company so you can follow my pattern for HELEN if you decide to do her. You'll need to change the vehicle number to 36 and HELEN's serial number is "30131581 S."

The M45, being an artillery device on tracks, had aiming stakes and from one of the photos of HELEN I discerned that these were stowed on the left fender outboard of the stowage boxes. I made these from white styrene rod and marked them with red tail stripes cut from a decal sheet for an American WWII airplane. That's twice the flyboy decals came to my aid on this project and speaks words to why a scrap decal box is handy.

Swappity, Swap

And that was it. One of the easiest conversions in my memory. Little more than a turret swap, the corrections being painless for the most part. Thanks to MB doing this conversion. I can now add a neat vehicle to my collection of American combat tanks and one I never thought I would ever build. MB did the turret well enough and the conversion kit is easy enough to make a Little Peter eligible for consideration for your collection too. I was very pleased with the result. With the reservations mentioned above about the gun tube, I can recommend this kit to anybody who is not afraid to tackle the well detailed and complicated DML hull. Pershing geeks are going to love it.

—Pete Harlem

MMiR RECCE

MB Models M45 Turret. Kit number MB1117. Kit graciously donated by the manufacturer. Suggested retail $17.95

T26E3 Heavy Tank. Kit number 6032. Suggested retail $37.98.

M26A1 Pershing. Kit number 6801. Suggested retail $39.98.

References

This Kind of War, by T.R. Fehrenbach, 1963, page 274 has a brief account of the arrival of the 6th Tank Battalion at Pusan. This is a good historical account of the events in which the M45 was used, but does not talk about the tank itself.

M-45 Close-Support Medium Tank by Duane Thomas, AFV-G2 Magazine. Date and issue unknown on this short article on the M45 which included line drawings.

Pershing A History of the Medium Tank T20 Series by R.P. Hunnicutt, 1971. Fiest Publications. The bible, man! Good coverage of the prototypes and a brief history. Also has a side view photo of HELEN crossing the Kumho river in 1950.

Tank Warfare In Korea 1950-53 by Steven J. Zaloga and George Balin, 1994. Concord Publications. Most of the published photos of HELEN appear in here.

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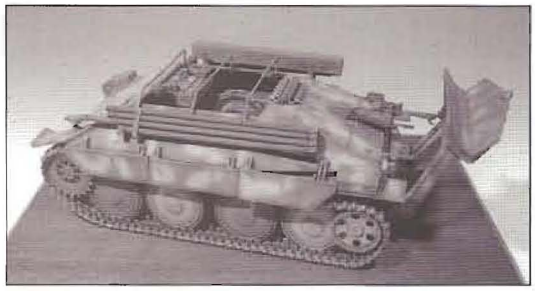

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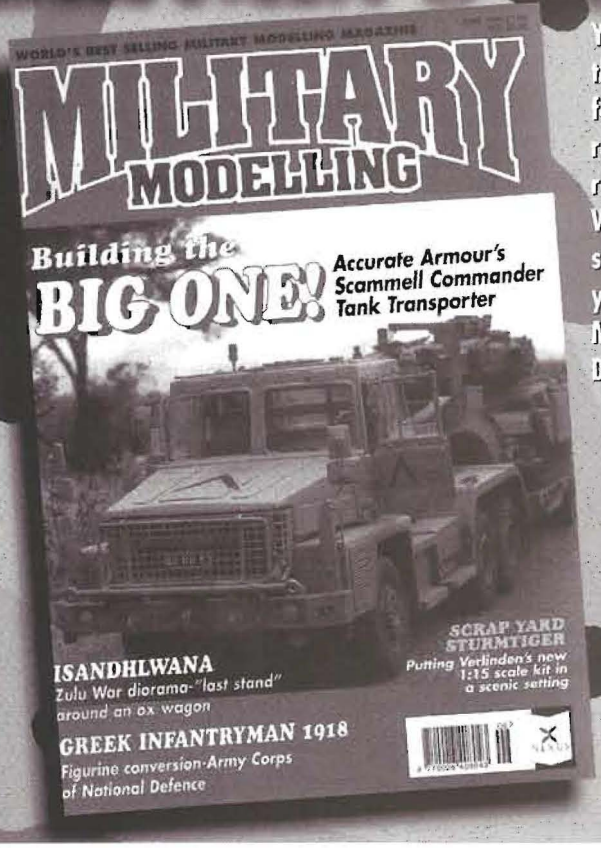
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Mini-Men

A Look at What's New on the Figure Front

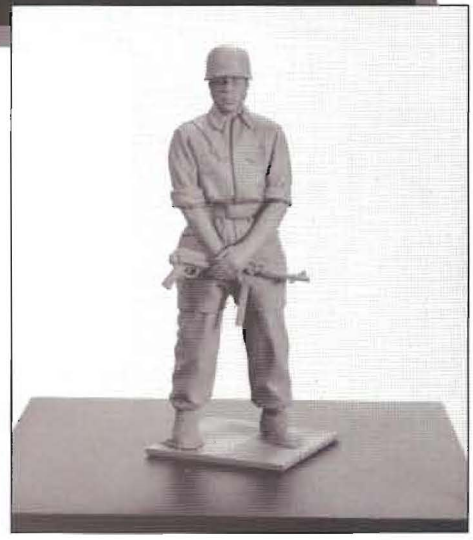
We're doing something a little different this time around. Mini-Men is being presented more in the form of a "gallery" than our usual extensive blatherings. There's two reasons for this. One is that there is just so much stuff, it's much easier to fit it all in this way. And secondly, we'd like to get your reaction on an amended format. Which do you like better? More or less? And one more thing. This will probably be the last time we do the bigger 1/16th. Again primarily for space reasons, but also (again) due to the proliferation of 1/35th scale items.

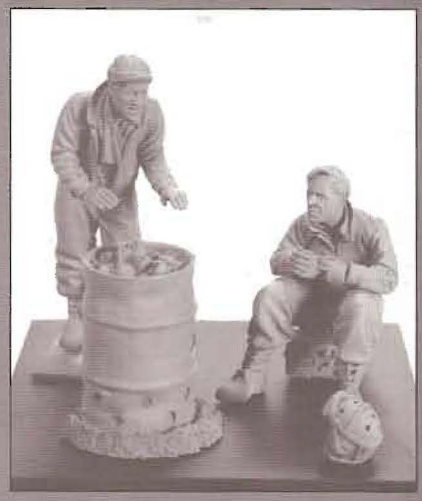
U.S. Tank Crew (NW Europe 1944). #6054. The newest of DML's tank crew sets. This time we get a full complement for any Sherman, Pershing or TD. Some of the best "facials" yet. A super set.

Soviet Anti-Tank Team 1942-1944. #6049. Typical of the teams that roamed over the Russian battlefield during this time, we get two different teams; one carries the PTRS-41 AT rifle and the other carries the PTRD-41 AT rifle. A good call on DML's part as both were common. They both were 14.5 mm single shot weapons dangerous only to the Panzer IIIs and IVs. One bag of rounds is supplied for the PTRD-41.

Signaler, Herman Göering Division, Tunisia 1943. #1608. As usual, this latest piece is inspiring by a smaller 1/35th figure. This larger version packs mucho detail and we were impressed with the recessed equipment such as the grenade and the ammo pouch. The larger format means more painting detail for that tunic.

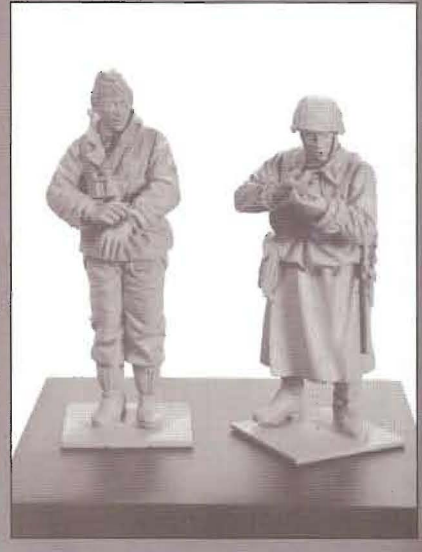
Hornet has finally completed their much anticipated Russian tank rider set with the addition of of RH12, Tank Rider (seated) and RH13, Tank Rider Jumping. These join their two earlier releases of the same subject. Both are beautifully rendered and are no less than the high standard which Hornet has achieved for these many years. There are several other Russian WWII subjects in the Hornet line, so one could work up quite a diorama around these pieces. The third new item is a German Paratrooper (GH24). He is early war in flavor and strikes a casual pose with his arms folded in front of him. He'd look great standing in front of a building or vehicle as a simple vignette.



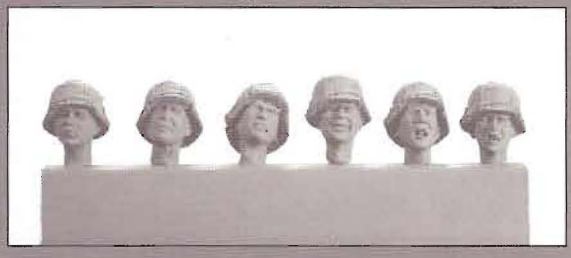


VP's latest pick up an Allied theme with several sets to surround the current batch of Allied armor. #1118 U.S. MP and Tanker WWII is a re-release in the case of the MP, and a new figure pouring himself a cup of Joe. Next is another "instant dio," #1105, U.S. Tankers WWII Warming Up. The set is complete with a improvised 88 gal. stove, a crate and a tanker's helmet. Two chilly looking dudes make up #1130, U.S. Tankers WWII Loading Ammo. The figure on the right is meant to stand on top of the subject tank. Our fav this quarter is #1131, German NCOs WWII. The figure pulling on his gloves is truly superb and would look fantastic next to a Panther or Tiger in Winter camo. Our big scale pick this time is #1125, U.S. Marine Iwo Jima. He's all decked out with a Thompson, grenades and even a shoulder holster for his .45. With very little modification, he'd make a great crewman for the big VP Stuart kit. A detailed plaster base is included.

Jaguar has begun to pick up the pace with its figure sets. The three sets shown here represent several that are now on the market. #63011, Germans at Rest, "Have a Drink" is meant to be posed around a Panzer IV (a Panzer III might work). The crewman reaches out of the side hatch to offer a bottle to an SS Schutze (it's only water, of course). Next up are two Fallschirmjäger sets. The first is #63010, German Paratroopers "Got a Light." This a RPzB 54 team hanging out with their Pall Malls. The second set is #63009, German Paratroops at Rest. This is just two Sturmgewehr armed troopers taking five. All the Jaguar sets contain styrene weapons from DML, which is a pretty good idea. Both the para sets would go great with earlier offerings from Warriors.



The second in Warrior's "dio in a box," (remember the Berlin Sewer?) this piece is entitled The Surrender (35054). It's an all resin concoction and the craftsmanship of the many parts is quite high. There is some very fine detail in the brickwork and the street rubble. Construction is a snap and clean-up is minimal. The two forlorn looking Germans create a great effect as they appear to emerge from a cellar in the presence of a cigar chomping GI (also see below). We look forward to more of these types of products.



Warriors has, for some time, offered replacement head sets. There are a total of seven now in the range of German subjects. We show the four latest sets here. From the top: German Head Set #4, 35055, six heads with the cut down Fallschirmjäger helmet. German Head Set #5, 35061 is a mixed bag of four soft hats, a helmeted head and a bare head. German Head Set #6, 35065 offers six helmeted heads with camo covers. German Head Set #7, 35070 contains six heads wearing the Wehrmacht fur cap.

35060, U.S. Infantry ETO offers all the late war M43 gear. He looks as though he's reacting to something and he strikes us as the perfect companion to the cigar guy in the Warrior's vignette.

35060, U.S. BAR Gunner, ETO is the above mentioned figure contained in the "Surrender" set. Still plenty of uses for him and his pals.

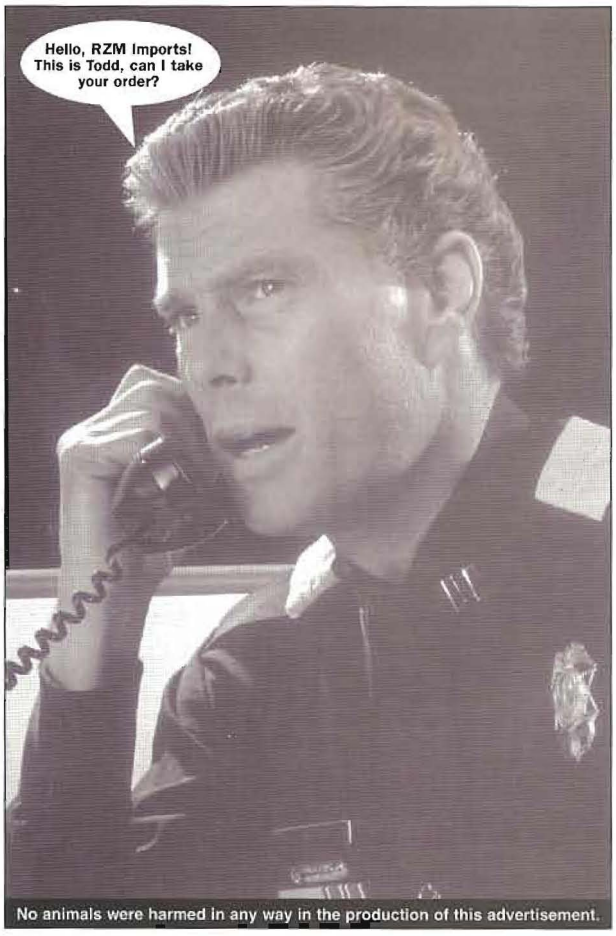
35057, German Graves Registration is a somber looking cat with a wooden cross and a shovel. Not a happy job in any uniform. He's mostly late-war kit and his camo apron is different but very accurate.

35066 is listed as a Waffen SS Wespe Crew, but it wouldn't take much to make them Wehrmacht. One figure is posed to fit in the forward hatch, while the other stands around looking freezing cold. Obviously, there are dozens of other uses for these two guys.

Yet another unique piece from Warriors is 35064, SS Daydreamer. He a one-piece casting that consists of the figure, all his gear and the ground around him. It might be a trick to get him blended in to the surrounding groundwork, but we still like it. Good going guys.

Another guy hoping for a heat wave is 35067, Waffen SS Wearing Overcoat and Blanket. There's nothing on this guy that pins him as SS, so he would still have a broad range of uses. He'd look great with the Wespe pair (not a coincidence we're sure).

Saving the best for last, we present two 1/16 scale figures from Warriors. The first is 16009, U.S. Infantry Europe 1944-45. This is another stunner from John Rosengrant. He's all decked out for winter combat with his wool melton overcoat, full kit and a wonderfully rendered M1 rifle. All you need to add is the sling. Great pose. Great expression. The second figure is only slightly less impressive and certainly no less detailed. USMC BAR Gunner Korea (16020) represents well the troops seen at the time of the retreat from the Chosin Reservoir. He wears the parka type overcoat with full shoepacks, trigger mittens and an M1951 pile field cap under his helmet. His back pack is a wealth of detail and the BAR is superbly executed.



No animals were harmed in any way in the production of this advertisement.

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RETRACTION

In the last issue we stated that buying MMiR would make you rich, successful and highly attractive to women. What we meant to say was that MMiR has some really cool pictures of tanks and is a good read. We are sorry for any misunderstanding.

READER CLASSIFIEDS

WANTED: Any 1/35th spare parts, figures, accessories, broken kits you no longer want. 1/35th Squadron Combat Line of white metal figures. R.P. Hunnicutt's Pershing. Doug Somers, 417 Harmony Drive, Wheeling IL 60090-6215.

FOR SALE: 1/35th Metal Artillery and resin accessories. PAK 38: $25.00. LeFH 18: $45.00. WWII US or German packs 20 pcs: $6.95. Asst. crates 16 pcs: $8.95. For current listing send LSSAE to: Mad Mac's Workshop. P.O. Box 430. Coventry RI 02816-0008.

WANTED—ESCI WWII 1/72 80 HND 83 series armor, ROCO WWII U.S. halftracks and armored cars. German WWII halftracks and armored cars. ESCI 1/72 hard plastic WWII figures. FUJIMI 1/72 hard plastic German Africa Korps figures and old Airfix, ESCI watchbox, ROCO, ROSHKOF and EKO catalogs. Also giant WWII figures. Jim Glynn 203 Old Allamuchy Rd, HP1.3 Hackettstown, NJ 07840.

WANTED: R.P. Hunnicutt's "Pershing". Willing to pay $$$ depending on condition of book. Italeri crusader kits unbuilt. Also looking for reference books with lot's of pictures on WWII Italian men and equipment. Contact Mike Mcilroy, 2411 Voorhees Ave. #2 Redondo Bch. CA. 90278 (310) 214-3714.

WANTED: The following kits in 1/35. Tamiya's Horse Drawn German Field Kitchen. Tamiya's Mounted German Infantry. ESCI's Horse Drawn German Supply Wagon. Will pay for complete, unassembled kits—will consider semi-assembled. Steve Parker, 16418 Sky Blue Lane, Houston, TX. 77095.

WANTED: Tamiya 1/35th scale JSIII, built or unbuilt, must be complete. Contact Bill Vanek 10731 S. Lavergne, Oak Lawn, IL 60453.

1/35 scale drawings and scale drawing sets of World War Two German and Allied AFVs/PANZERS. Sd. Kfz. 251 Mittlerer Schutzenpanzerwagens (thirty-two vehicle types; Ausf. A, B, C and D). Each set sells for $16.50 and has three to four 11 1/2" x 17 1/2" drawing sheets. Interior scale drawings are to a constant scale of 1/17.5. Many views of gun mounts, gun sights, I/R equipment, radios, stowage, etc. Other subjects are Sd. Kfz. 171 Panther (all types including JagdPanther), Ds. Kfz. 181 Tiger I (early, mid and late production), Sd. Kfz. 9 FAMO F3 Zugkraftwagens (all types), BergePanzers (all types), French Somua Halftracks (all types), German military trucks (many types), German and Russian armored trains and Panzerdraisines (armored railway trolleys mounting German and Russian tank turrets), plus many other subjects. Please send $5.00 for ten page brochure to AFV/PANZER HISTORICAL RESEARCH CENTER, P.O. Box 2611, Boise, Idaho. 83701. U.S.A. Each brochure comes with a sample scale drawing (a $5.00 value). Please indicate area of interest pertaining to the above mentioned military vehicles.

GROWING CANADIAN RESIN MANUFACTURER wishes to contact qualified scratch-builders to build master patterns. We are looking for a variety of items, including armor and aircraft conversion and detailing parts, diorama accessories, figures and figure conversions. Terms are negotiable. Please send photos of items you have scratch-built, along with your particulars (incl. phone number and fax number if available) to Ampersand Publishing.

WANTED: The Tank Magazine, volume 7, number 11, November 1984; also looking for the old Osprey/Vanguard numbers 7, 10, 12, & 14. Call (206) 572-8246.

WANT TO TRADE OR PURCHASE: 1/35 scale kits also 1/9 scale ESCI kits. I would also like to correspond and trade photos of finished kits. Write for my trade list. Randy Heiler, 650 Springfield Cir., Roseville, CA 95678.

FOR SALE: Armor kits, all types, all scales WWI to modern. Send two 32 cent stamps for list. Afrika Korps enthusiast wants books, mags and information on the Italian and German armies in Africa during WWII. Also 1/72, 1/76 and 1/160 scale armor and equipment. Always buying kits send me your list. Peter Rechkemmer, 3410 Sands, El Paso TX 79904.

FOR SALE: ALL KITS ARE UNBUILT, 1/35 DML figure kits. DML Light Seal Support Craft, some Tamiya armor kits, plus Verlinden 1/35 and 120mm kits. For list and price send L.S.A.S.E. to Danny Trepanier, 10070 Beach Rd. Waukegan IL 60087.

FOR SALE; Older issues Tamiya, Italeri, Testors/Italeri, Airfix, Peerless, etc. 1/35-1/32 Scale. For list send $1 and SASE to: Robert D. Davis, 518 Mary St., Marion, Ohio 43302

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MODELING MAGAZINES AND BOOKS FOR SALE: "IPMS Update", complete run, first to last issue (Jan. 73-March 88), 88 issues in pristine condition $150; "IPMS Journal", vol. 1&2 complete (12 issues) $25; "Military in Scale" (UK) Jan. through Dec. 95 (half price) $25; Guide to Military Modeling, Guide to Military Vehicles, Guide to Military Dioramas (UK Military Modeling specials, 438 pp, perfect, half-price) all 3 for $20; German Self Propelled Guns (from Model Art, Japan) perfect, half price $20; perfect copies of following Schiffer books at half price, German Artillery in World War II $12.50, History of the Panzer Troops $12.50, HG Panzer Division $12.50, Tiger Ace: Life Story of Michael Wittman $17.50; Panzerheld: The Story of Michael Wittman $18; Datafile (UK) German Tanks & Formations 1939-45 (94 pp, half price) $5; Tanks Illustrated #27 Hitler's Panzers (perfect!) $10; Hitler's Samurai; Waffen SS in Action & Hitler's Teutonic Knights: SS Panzers in Action (two hardbound volumes at half price) $17; Rommel: Battles and Campaigns $10; Hitler's Teutonic Knights: SS Panzers in Action (two hardbound volumes at half price) $17; Rommel: Battles and Campaigns $10; Hitler's Legions: German Army Order of Battle, WWII $9; Encyclopedia of Military Modeling (192 pp, all color) $10; German Airborne Troops $10. Prices do not include postage—depending on the size of your order include an additional $5 or $10 and any excess will be refunded with your shipment. Jon H. Randolph, 18425 Boone Road, Columbia Station, Ohio 44028.

WANTED: The following kits in 1/35 scale: #35103 Tamiya—Horse drawn German field kitchen; #ES5047 ESCI—Horse drawn German supply wagon; #ES5018 ESCI—German SdKfz 10/4 with 20mm, 30aa flak and crew; #ES5027 ESCI—German SdKfz 10/Hanomag 7 with Panzer Grenadiers; #ES5008 ESCI— SdKfz 10 and M18 light howitzer; #ES5013 ESCI— German Anti-Aircraft with, 20mm flak 30; #HE1132 Heller—French Hotchkiss (H35); #HE1170 Heller—French 50mua (S35); #TM(35104) Tamiya—German Krupp Protze; #DR6014 DML—Waffen SS tank crew; #IT219 Italeri—British Crusader MMIII; #IT221 Italeri—Opel Maultier; #IT323 Italeri—U.S. mil 57mm; #TA(35110) Tamiya—U.S. M8 self-propelled Howitzer; #TA35074 Tamiya—Tent Set-Afrika Korps; #TA35041 Tamiya—British M-3 Grant Mk I; #TA35011 Tamiya—German PzKpfw III Ausf. m/n; #NI-DT3 501 Nichimo—Sherman M4A1; #IT253 Italeri—U.S. M4A3 Sherman; Tamiya—Saladin MKII; #IT250 Italeri—Sherman; Tomy—Patton's Command Vehicle. Will pay for complete unassembled kits—will consider semi-assembled. Herminro Ramirez Jr., 216 West 99 St., apt #17, New York, NY 10025. (212) 665-0377 anytime.

THE HISTORICAL MINIATURE FIGURE SOCIETY OF COLORADO meets on the first Thursday of each month from 6:30 P.M. to 8:30 P.M. at the Aurora Central Public Library, 14949 East Alameda Drive, Aurora, CO 80012. For more info contact, HMFSC, P.O. Box 461562, Aurora, CO. 80046 (303) 693-7924

WANTED: will pay top $ for; Italeri or ESCI. Horse drawn convoy, Italeri Panzer 38t and Crusader III, Tamiya German Field Kitchen. Squadron/Signal's Panzer Grenadier Division Gross Deutschland; Panzerjager in Action. Also any Squadron/Signal or Osprey WWII Armor books. Send price, condition, phone, and address to Terry Longoria 8601 E. 17th Ave. Anchorage, Alaska 99504.

FOR SALE BY AUTHOR: Desert Storm Allied Ground Forces Order of Battle. Covers all U.S. Army, Marine Corps, allied combat units & support units down to brigade/group level/140+ pages bibliog. $16 + $1.74 postage (USA); postage to Canada $1.85 rest of world, $4. VA residents add $.72 sales tax. Checks, money orders (US$) only. Thomas D. Dinackus, 4719 Major Court, Alexandria, VA 22312.

I know this an armor magazine, but I am getting deeper into armor and need to first get rid of many of my aircraft kits. Possibly some trackheads are also airheads. Most kits are 1/48 scale, will also consider swaps for armor kits in 1/35th scale. Please L.S.A.S.E. for list of kits to: Robert W. Marshall, 12 Bunn Rd., Hamburg, NJ 07419.

WANTED: all those 1/35 scale parts, accessories & kits (built and unbuilt) that you no longer want. Also any IDF reference material you don't want. John Kelsch, 4748A Lee Village, Ft. Campbell KY, 42223.

FOR SALE: Over 60+ armor kits and 30+ accessories/conversions, all 1/35th. Send LSASE to Lance Bevins, P.O. Box 674, Franklin, NC 28744.

TRADE/SELL: Tamiya 1/16 Leopard remote control (not R/C); Verlinden 1/15 StuG III; Bandai 1/30 Hummel; Mitsuma 1/20 Willys; Czech Master 1/35 StuG IV. **WANT:** ESCI 1/9 Kettenkrad and Triumph 3HW; Tamiya 1/25 SU-100 and 1/16 King Tiger. Also other large scale armor kits built, unbuilt or damaged. Bob Johnson, 418 Mokelumne River Drive, Lodi, CA 95240 (209) 369-5017.

FOR TRADE OR SALE: 1/35th scale modern armor kits and accessories. Tamiya, Italeri, DML, etc. All unbuilt and in excellent condition. Would like to trade for older issue and/or discontinued kits of WWII armor, such as Tamiya's M10 Tank Destroyer and Testor/Italeri's M24 Chaffee light tank. For list send S.A.S.E. to Wilfredo Pacheco Jr., 1955 Sedgwick Ave., Apt #5C, Bronx, NY 10453-2724.

M114A1E1 RECON VEHICLE: I wish to purchase or trade for the Accurate Armour 1/35th kit w/the Hispano Suiza 20mm. Contact Hank Johnson, 7704 Willow Point Dr., Falls Church, VA 22042. (703) 204-0794.

WANTED: "two" 1/35 scale Verlinden large German rafts, any condition, or a similar item. Tamiya's SdKfz. 251/any version. Will consider partially built. Willie A. Ward, Baumholder CID, Unit #23813, APO AE 09034.

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If you have a message or a service that you would like to offer through this section, but wish to remain more or less anonymous, we now offer box numbers. The cost for subscribers is five dollars and the cost for non-subscribers and commercial customers is fifteen dollars. These rates are per issue and must be pre-paid. Responses are forwarded on a weekly basis.

Tamiya has some great new additions to our Military Miniature Series, and as usual, the difference is in the details.

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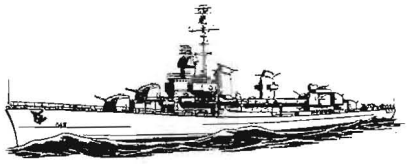
There are also two significant new birds in our 1:48 scale aircraft series. The twin-engined Mitsubishi Ki-46III reconnaissance plane, nicknamed the "Hyakushiki Shitei" by the Japanese or simply the "Dinah" by the allies. With a wingspan of over a foot (305mm) and detailed replicas of its 1,500hp radial engines this is an awesome and beautiful model. Another ace in the Asian skies was the Mustang F-51D, with its menacing shark tooth grin. Our version of this Korean conflict vet features ground attack payload and square-ended propeller blades.

1:48 Mitsubishi Ki-46 III #61045

1:48 F-51D Mustang (Korea) #61044

Finally, there's the U.S. Navy DD445 Fletcher, survivor of the sea battle at Guadalcanal. This significant ship is the latest addition to our 1:700 Waterline Series and features detailed bridge, radar and armaments.



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1:35 German Tiger I Mid Production Commander Otto Carius (Limited Edition) #35202

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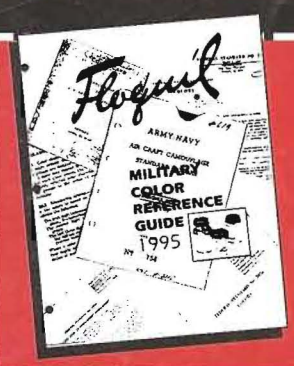

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